



1-Port Wireless USB 2.0 Print Server

Model # APSUSB201W

User's Manual

Ver. 2A

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# 1 Introduction

Congratulations on purchasing your 1-Port Wireless USB 2.0 Print Server. It is the easiest and fastest way to deploy printers on your network.

This compact Print Server uses your network router to connect various computers and printer together. It manages the flow of print files from computers to the connected printer, delivering print jobs to high-performance printer much faster than a file server or a PC acting as a print server can.

The Print Server features a Web-based Configuration Utility, which allows you to set up the Print Server through the web browser easily and quickly. It also includes a powerful software called, **PS Utility**, a user-friendly program that allows you to configure some basic functions of the Print Server such as performing a factory reset or updating the firmware.

## 1.1 Package Contents

Unpack the package and check all the items carefully, and be certain that you have:

- One 1-Port Wireless USB 2.0 Print Server
- One AC Power Adapter
- One Quick Installation Guide
- One Installation CD containing the PS Utility program and the User's Manual

If any item contained is damaged or missing, please contact your local dealer immediately. Also, keep the box and packaging materials in case you need to ship the unit in the future.

## 1.2 System Requirements

Operating System:

- Microsoft Windows 95/98/ME/NT/2000/XP/2003
- Apple Mac OS (with Apple Talk support)

For Web Configuration:

- Java-enabled web browser, such as Microsoft® Internet Explorer 5.0 or Netscape Navigator 6.0

## 2 Hardware Installation

### 2.1 Connecting the Print Server

**Warning:** Only a USB printer may be connected to the USB port of the Print Server. Connecting any other USB device to the Print Server may damage the Print Server.

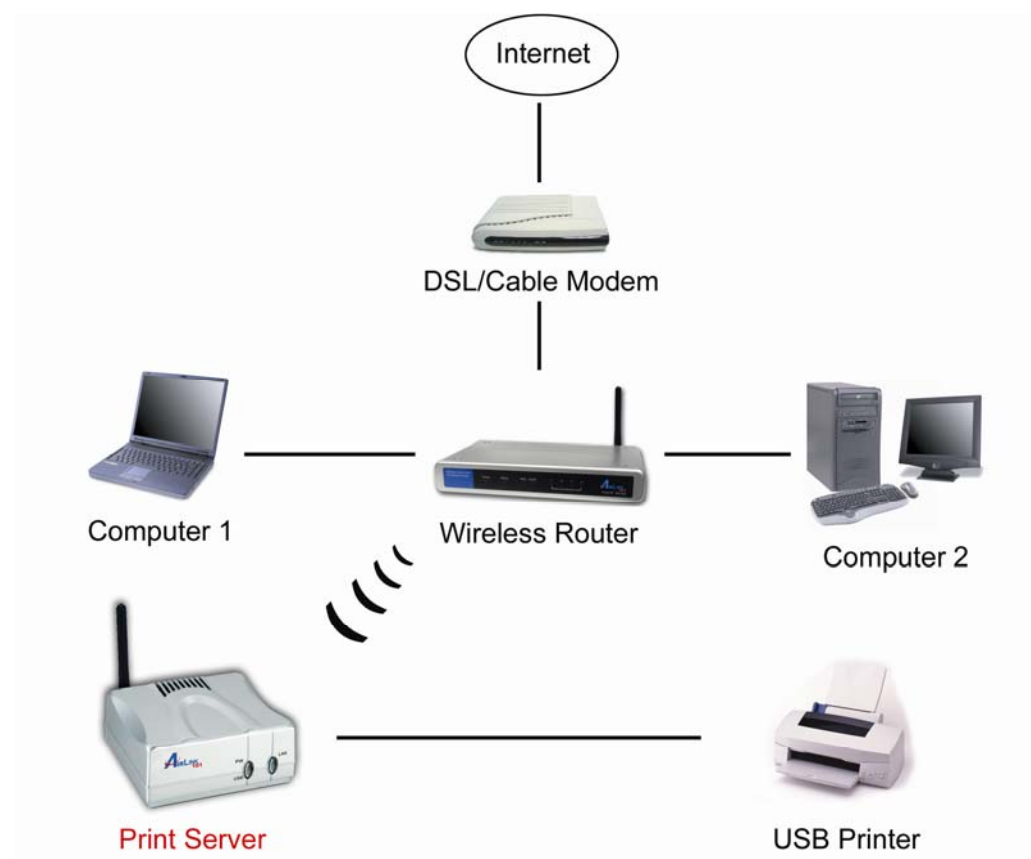
**Note:** Do not plug the power cord to the Print Server until you have reached **Step 4** of this section.

**Step 1** Connect one end of the Ethernet cable to the RJ-45 port of the Print Server and attach the other end of the cable to a wireless router. You may disconnect the Ethernet cable after a wireless connection is established.

**Step 2** Make sure the printer is powered **OFF**, then connect one end of the USB cable to the USB port of the Print Server and attach the other end of the cable to the USB port of the printer.

**Step 3** Power **ON** the printer.

**Step 4** Plug one end of the power cord into the Print Server and the other end into an electrical outlet.



### 3. Installing PS Utility

**Step 1** Insert the provided CD and wait for the setup menu to appear.

**Step 2** Click on **PS Utility**.

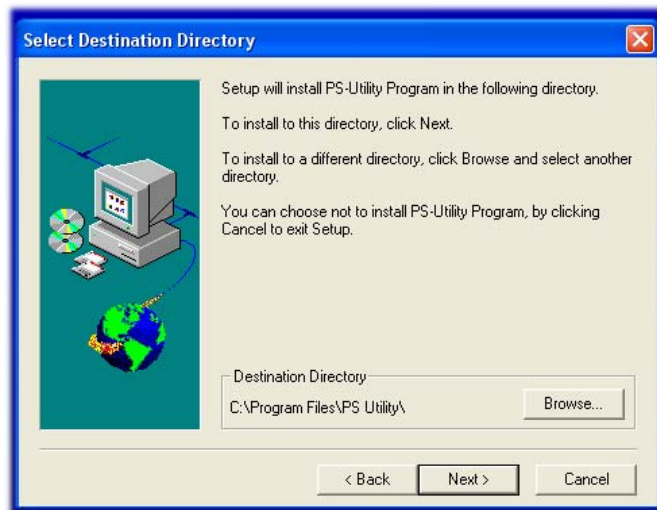


**Note:** If the setup menu does not appear automatically after you have inserted the CD, go to **Start, Run**, type **D:\autorun.exe** (where **D** is the letter of your CD drive) and click **OK**.

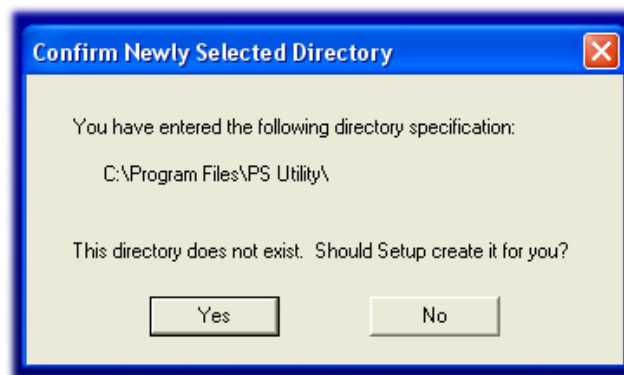
**Step 3** Click **Next**.



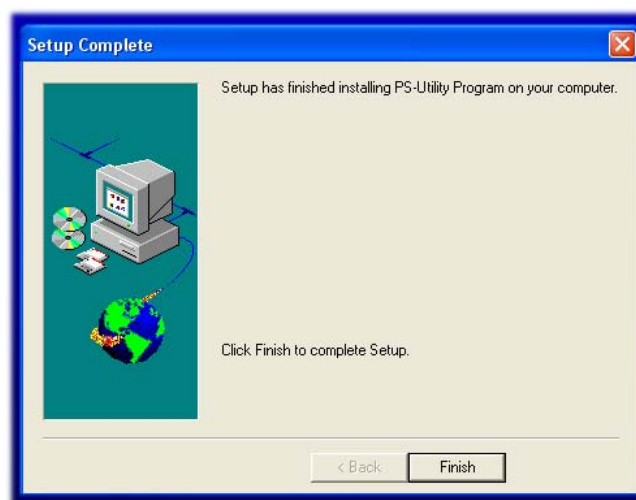
**Step 4** Click **Next**.



**Step 5** Click **Yes**.



**Step 6** Click **Finish**.



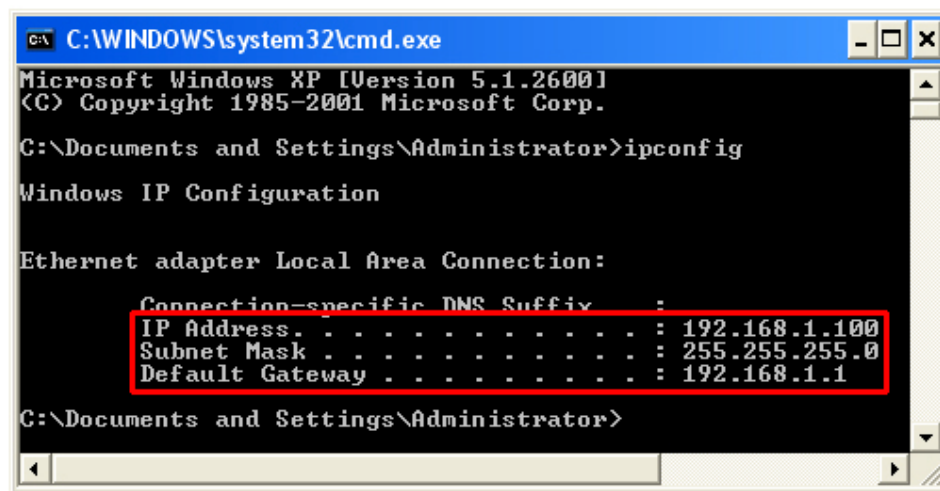
## 4. Configuring Network Setting

Before configuring the Print Server's network setting, please take note of your computer's TCP/IP setting.

**Step 1** Click on **Start**, **Run**, and type **command** (for Windows 95/98/ME) or **cmd** (for Windows 2000/XP) and click **OK**.

**Step 2** At the command prompt, type **ipconfig** and press **Enter**.

**Step 3** Write down the information for the **IP Address**, **Subnet Mask**, and **Default Gateway**. You will need these information later.



```
C:\WINDOWS\system32\cmd.exe
Microsoft Windows XP [Version 5.1.2600]
(C) Copyright 1985-2001 Microsoft Corp.

C:\Documents and Settings\Administrator>ipconfig

Windows IP Configuration

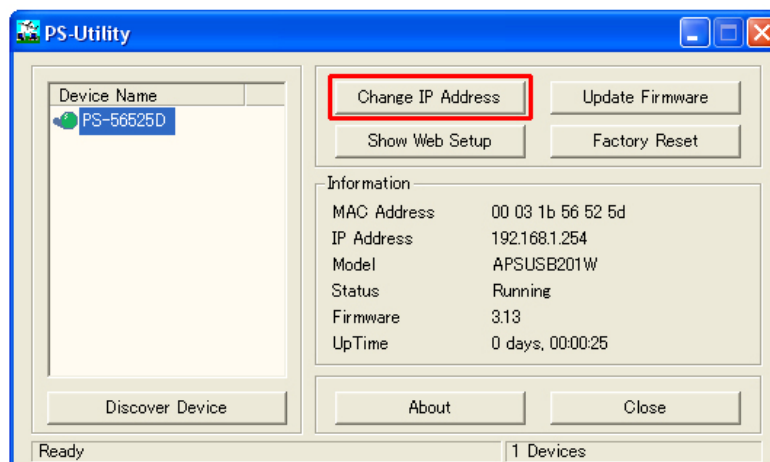
Ethernet adapter Local Area Connection:

    Connection-specific DNS Suffix  : 
    IP Address. . . . . : 192.168.1.100
    Subnet Mask . . . . . : 255.255.255.0
    Default Gateway . . . . . : 192.168.1.1

C:\Documents and Settings\Administrator>
```

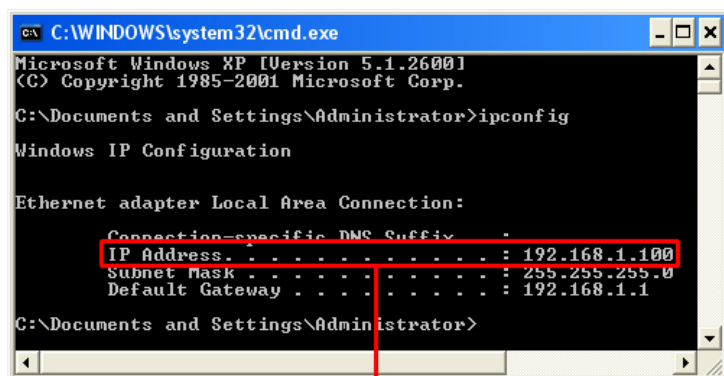
**Step 4** Run the PS Utility by going to **Start**, **(All) Programs**, **PS Utility**, **PS Utility v2.00**.

**Step 5** Make sure the Print Server is listed under the **Device Name** and click on **Change IP Address**.



**Step 6** In the **IP Address** field, enter a valid IP address, subnet mask, and default gateway that matches your local area network.

**For example:** If your computer's **IP Address** is **192.168.1.100**, enter the same three numbers: **192.168.1** in the corresponding fields.



```
C:\WINDOWS\system32\cmd.exe
Microsoft Windows XP [Version 5.1.2600]
(C) Copyright 1985-2001 Microsoft Corp.

C:\Documents and Settings\Administrator>ipconfig

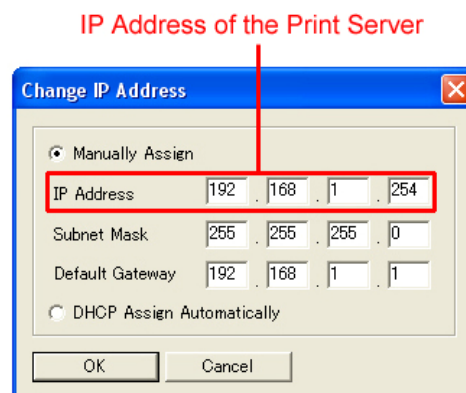
Windows IP Configuration

Ethernet adapter Local Area Connection:

    Connection-specific DNS Suffix  . : 
    IP Address . . . . . : 192.168.1.100
    Subnet Mask . . . . . : 255.255.255.0
    Default Gateway . . . . . : 192.168.1.1

C:\Documents and Settings\Administrator>
```

IP Address of your computer



Change IP Address

☒ Manually Assign

IP Address: 192 . 168 . 1 . 254

Subnet Mask: 255 . 255 . 255 . 0

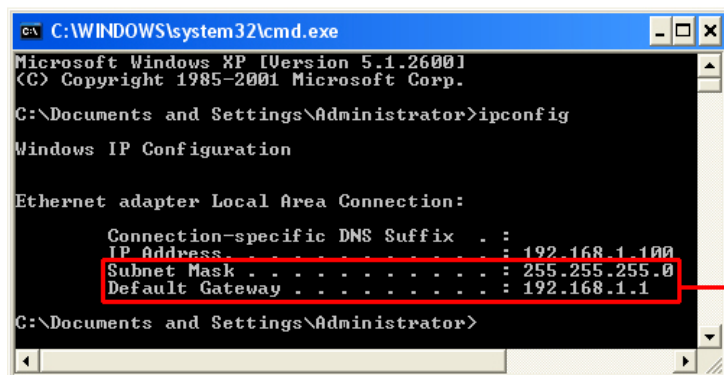
Default Gateway: 192 . 168 . 1 . 1

☐ DHCP Assign Automatically

OK Cancel

**Note:** You can leave the last IP Address number **254** as is unless another network device (i.e. the **Default Gateway**) is already using that number. If another network device is already using **254**, then change it to another number that is currently not in use (preferably **200 - 253**).

For the **Subnet Mask** and **Default Gateway** fields, enter the same number as the TCP/IP setting of your computer.



```
C:\WINDOWS\system32\cmd.exe
Microsoft Windows XP [Version 5.1.2600]
(C) Copyright 1985-2001 Microsoft Corp.

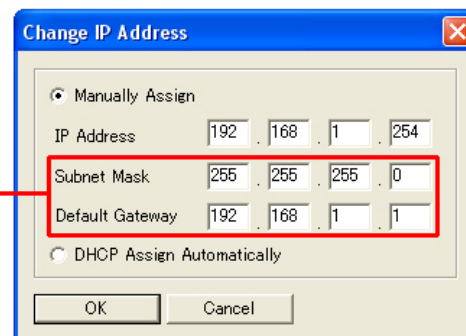
C:\Documents and Settings\Administrator>ipconfig

Windows IP Configuration

Ethernet adapter Local Area Connection:

    Connection-specific DNS Suffix  . : 
    IP Address . . . . . : 192.168.1.100
    Subnet Mask . . . . . : 255.255.255.0
    Default Gateway . . . . . : 192.168.1.1

C:\Documents and Settings\Administrator>
```



Change IP Address

☒ Manually Assign

IP Address: 192 . 168 . 1 . 254

Subnet Mask: 255 . 255 . 255 . 0

Default Gateway: 192 . 168 . 1 . 1

☐ DHCP Assign Automatically

OK Cancel

**Step 7** Click **OK**.

**Step 8** Close the PS Utility program.

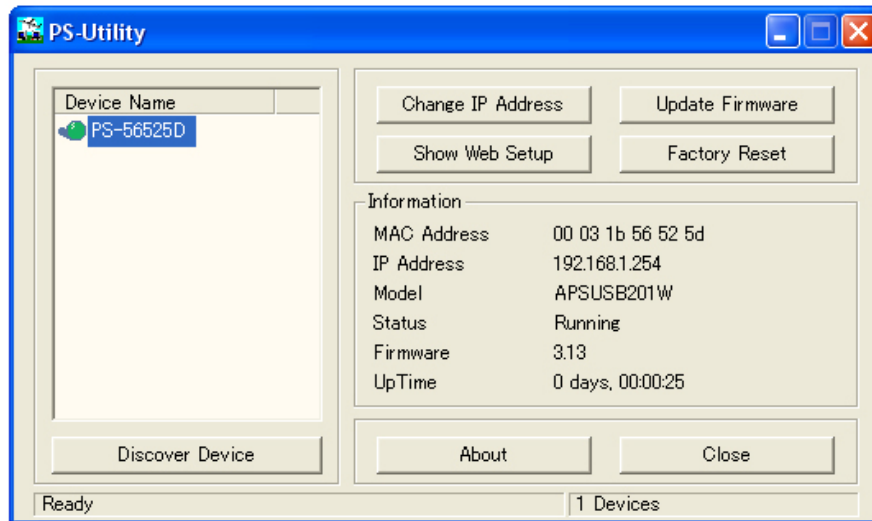


## 5. Verifying Network Connection

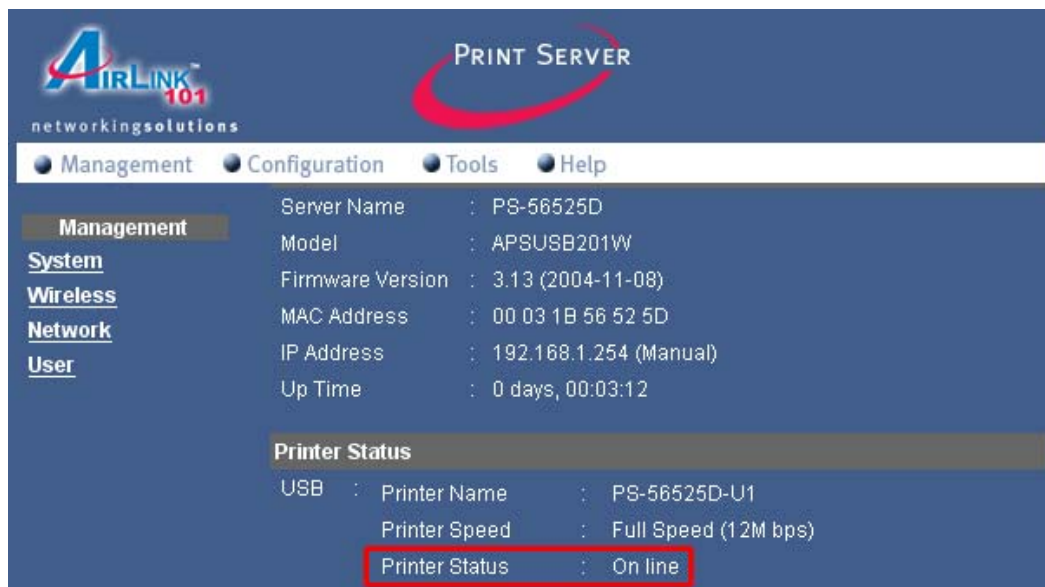
**Step 1** Run the PS Utility by going to **Start, (All) Programs, PS Utility, PS Utility v2.00**.

**Step 2** Make sure the Print Server is detected under the **Device Name**.

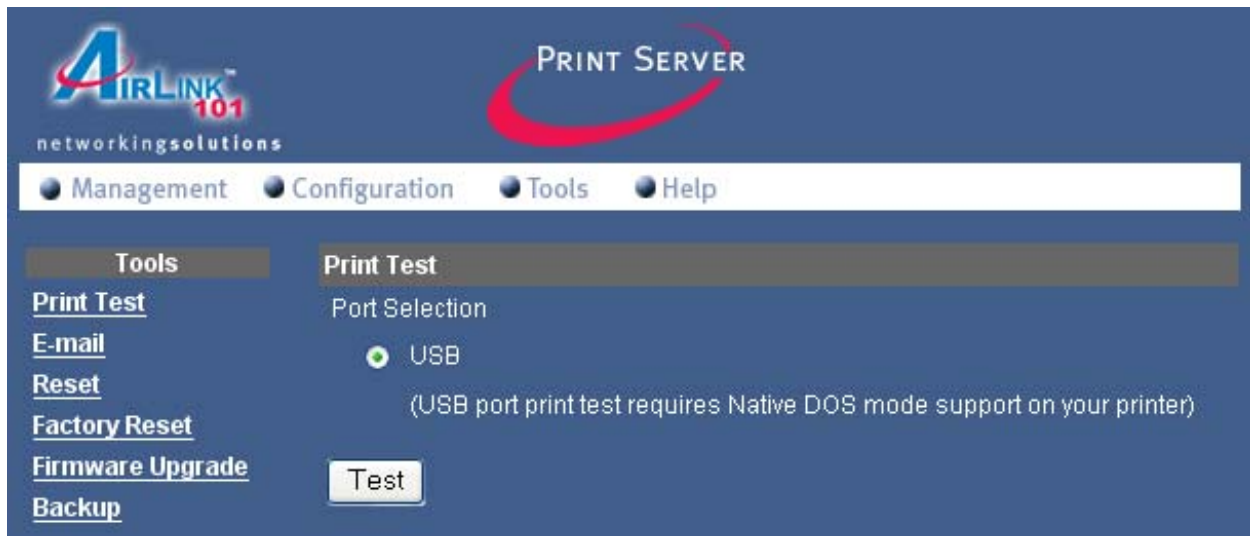
**Step 3** Click on **Show Web Setup** to display the Print Server's **Web Configuration Utility**.



**Step 4** Click on the **Management** link and select **Printer Status**. Make sure the **Printer Status** displays **On line**.



**Step 5** Click on the **Tools** link and select the port your printer is connected to and click the **Test** button. The Print Server will perform a low-level print test, bypassing the operating system layer.



**Note:** Your printer should print out a test page. If not, verify that the printer is powered on and all cables are securely connected and try again. If the printer still fails to print a test page, please check the printer compatibility list on our web site at [www.airlink101.com](http://www.airlink101.com) for a list of compatible printers. If your printer is not on the list, it may not be compatible with the Print Server.

**Step 6** Once the printer successfully prints out a test page, you may close the web browser and proceed to the next section.

## 6. Running PS Wizard

**Warning:** Make sure you have installed the printer driver locally on every computer that will use the print server in your network before running the PS Wizard. Otherwise, the PS Wizard will not run properly. Be sure to run the PS Wizard on all the computers that will use the print server in your network.

**Step 1** Insert the provided CD and wait for the setup menu to appear.

**Step 2** Click on **PS Wizard**.

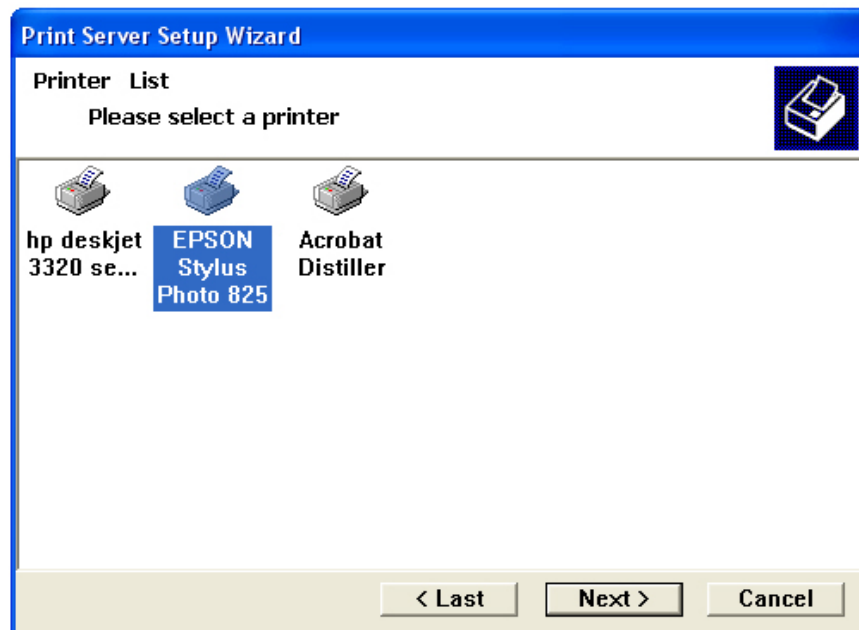


**Note:** If the setup menu does not appear automatically after you have inserted the CD, go to **Start, Run**, type **D:\autorun.exe** (where **D** is the letter of your CD drive) and click **OK**.

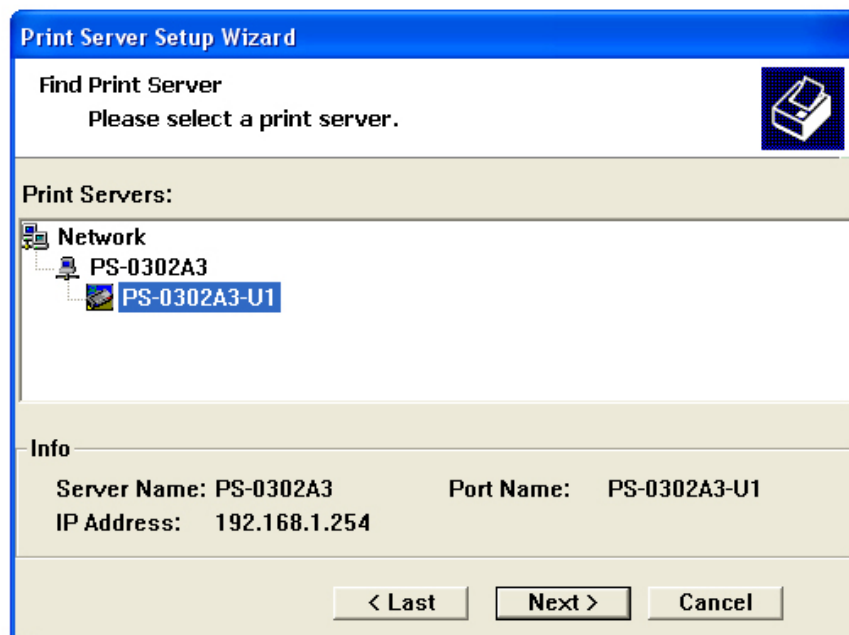
**Step 3** Click **Next**.



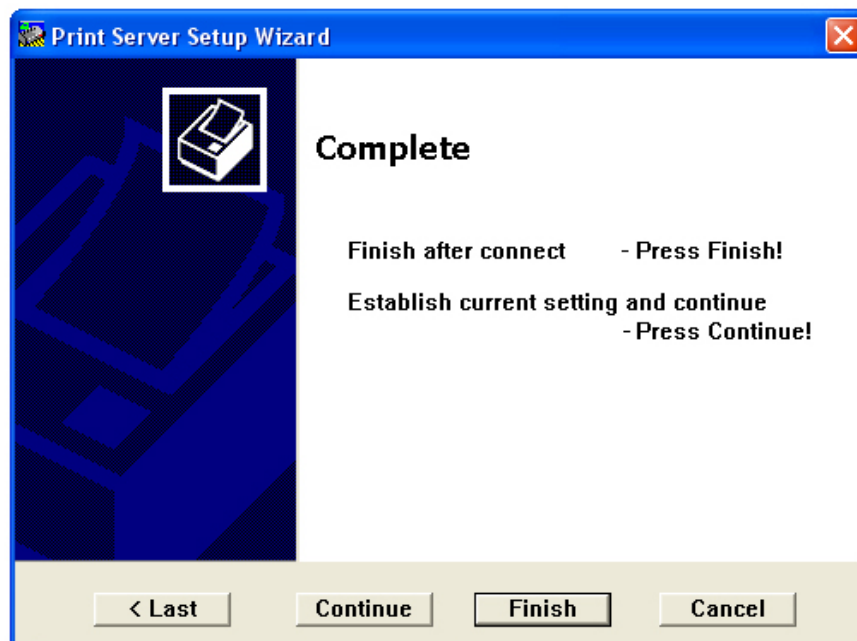
**Step 4** Select the printer that is connected to the Print Server and click **Next**.



**Step 5** Double-click on the **Print Server Name**, select the **Printer Port Name**, and click **Next**.



**Step 6** Click **Finish** and **OK**. (For Windows 95/98/ME, you'll need to reboot the computer).

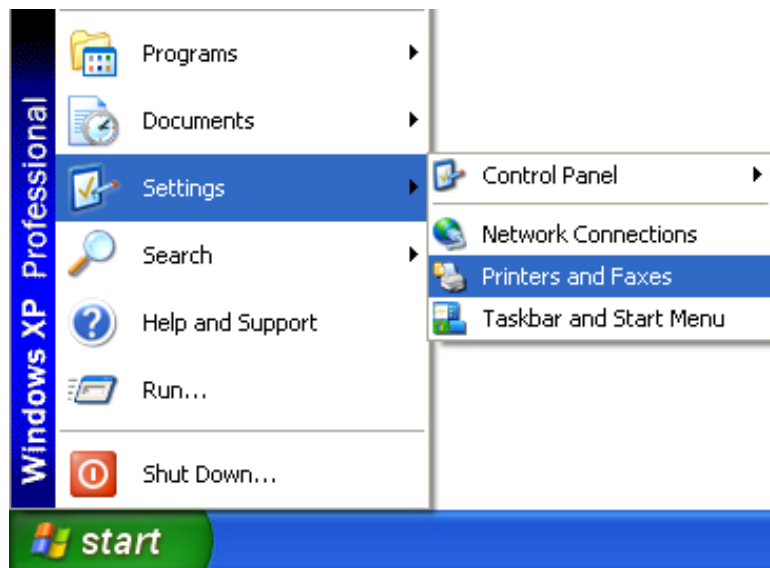


**Step 7** Run the **PS Wizard** on all the computers in your network that will use the Print Server.

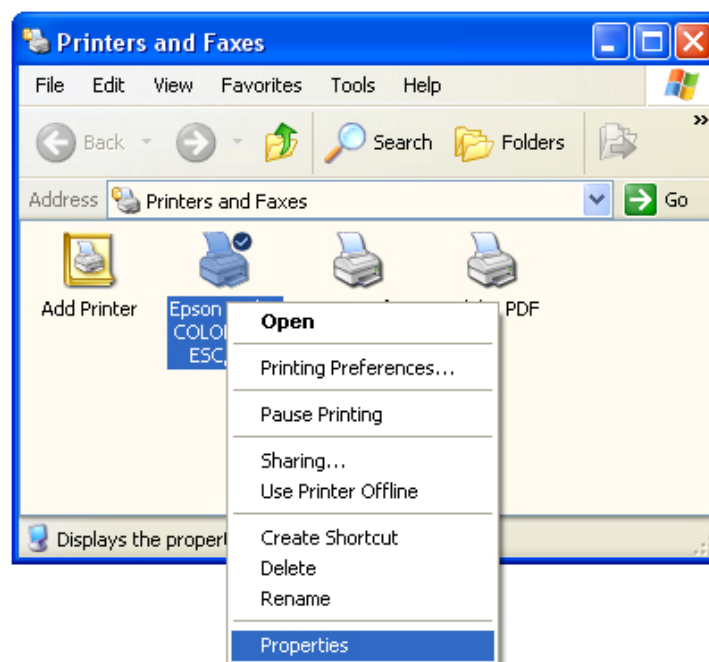
## 7. Performing Operating System Print Test

The final step in setting up the Print Server is to perform an operating system print test. Please note that the instructions below are for Windows XP, but the steps are similar for all the other Windows operating systems.

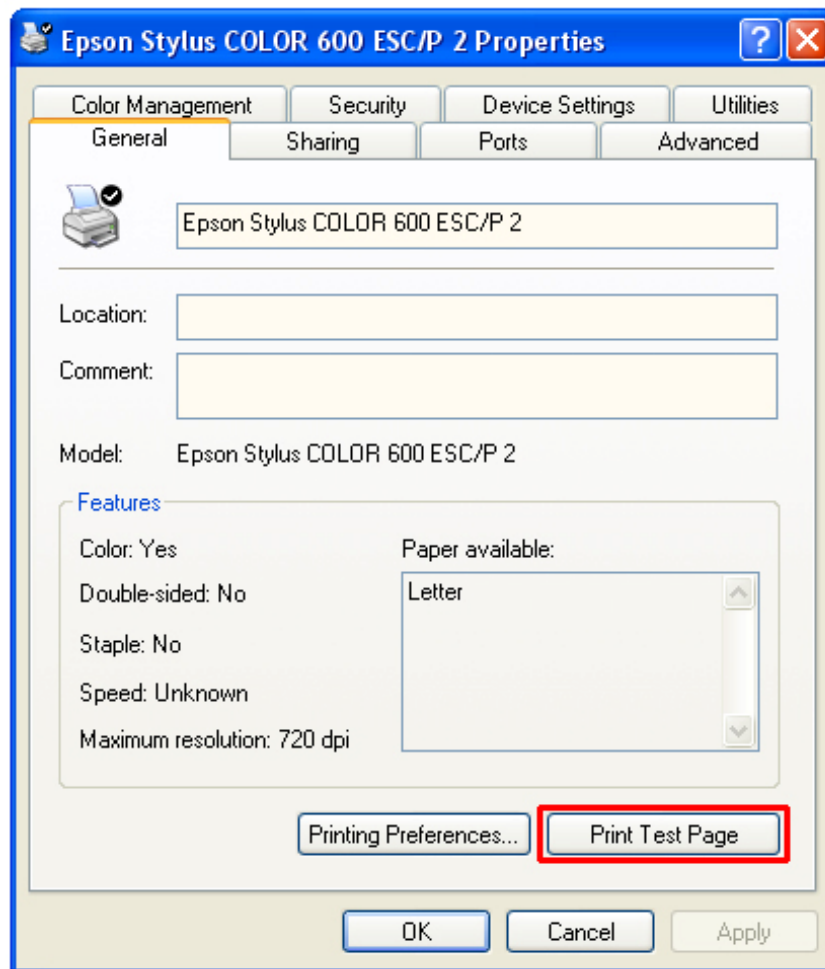
**Step 1** Click on **Start, Settings, Printers and Faxes**.



**Step 2** Right-click on the printer that is connected to the Print Server and select **Properties**.



**Step 3** Click on the **Print Test Page** button. Windows should print out a test page.



**You have successfully configured the Print Server for printing.**

## 8. Configuring Wireless Printing

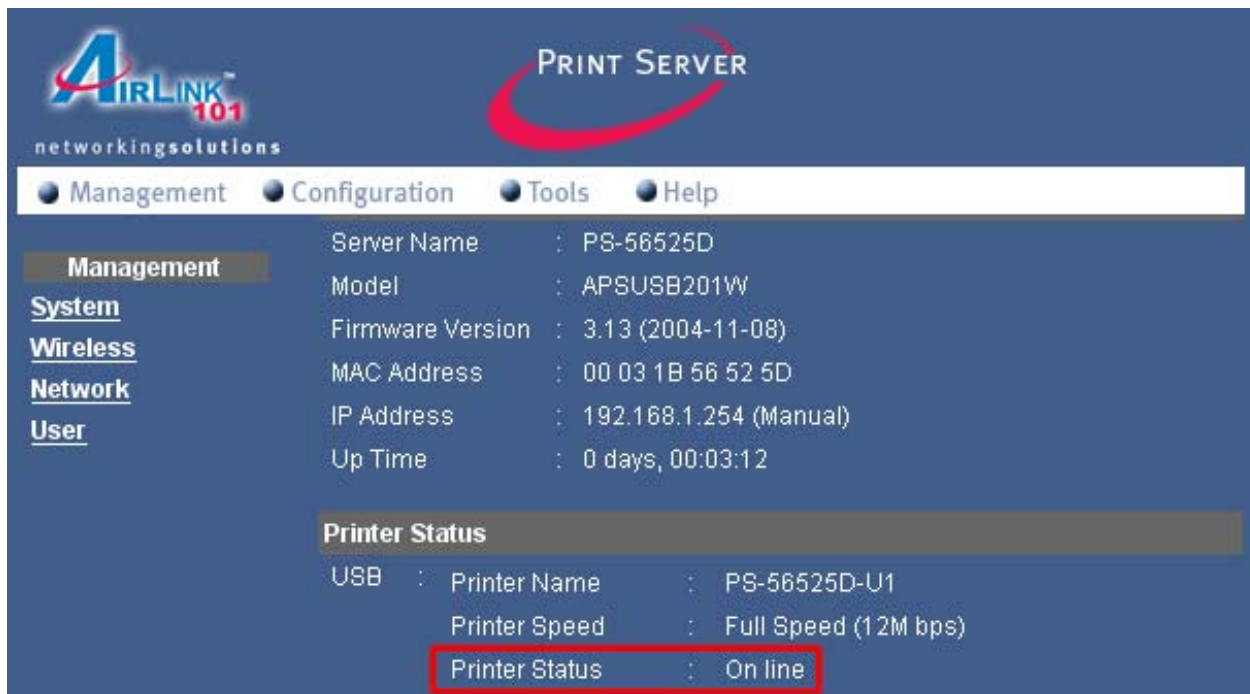
### 8.1 Infrastructure Mode Printing

The following section describes how to setup the Print Server for wireless printing. It is strongly recommended that you test the Print Server with a wired connection first before moving on to configure wireless printing.

**Note:** You should use a wired connection to configure the following wireless settings before unplugging the network cable from the Print Server.

**Step 1** Open the web browser and type in the IP address of your Print Server. (Default is **192.168.1.254**)

**Step 2** Verify the Printer Status is **On line**.



The screenshot displays the web interface of the AIRLINK 101 PRINT SERVER. The interface has a blue header with the logo and title. Below the header is a navigation bar with tabs for Management, Configuration, Tools, and Help. The left sidebar contains links for Management, System, Wireless, Network, and User. The main content area shows system information and printer status.

System Information	
Server Name	: PS-56525D
Model	: APSUSB201W
Firmware Version	: 3.13 (2004-11-08)
MAC Address	: 00 03 1B 56 52 5D
IP Address	: 192.168.1.254 (Manual)
Up Time	: 0 days, 00:03:12

Printer Status		
USB	Printer Name	: PS-56525D-U1
	Printer Speed	: Full Speed (12M bps)
	Printer Status	: <b>On line</b>

**Step 3** Click on **Configuration** and then **Wireless**.



**Step 4** If you are printing through a wireless router, make sure the **Connection Mode** is set to **Infrastructure**.

The screenshot shows the configuration interface for the AIRLINK 101 PRINT SERVER. The 'Configuration' tab is active, and the 'Wireless Interface' section is highlighted with a red box. Within this section, the 'Connection Mode' is set to 'Infrastructure' (radio button selected), and the 'SSID' is set to 'default' (text input field). Below the SSID field is a dropdown menu also showing 'default'. A 'Site Survey' button is located below the SSID field. Other settings in the 'Wireless Interface' section include 'Wireless Channel' set to 11 and 'Transmission Rate' set to 'Fully Automatic'. The 'WEP Encryption' section shows 'WEP Encryption' set to 'Disable' and 'WEP Key Format' set to 'HEX'. There are four input fields for 'Key 1', 'Key 2', 'Key 3', and 'Key 4', and a dropdown for 'Encrypt Data Transmissions Using' set to 'Key 1'. The 'Advanced Setting' section includes 'Beacon Interval' set to 100 (ms), 'Preamble' set to 'Long', and 'Authentication Type' set to 'Both'. 'Save' and 'Cancel' buttons are at the bottom.

**Step 5** Type in the **SSID** (network name) of your wireless router in the **SSID field**, or use the drop-down menu directly below the **SSID field** to choose your wireless router.

**Note:** you can also click on the **Site Survey** button to view all the available wireless network. If you do not see your wireless router, click on **Refresh** and/or reset your wireless router.

On Site Wireless Networks						
	SSID	MAC	Channel	Mode	WEP	Signal
1	default	00 0D 72 20 1D 29	6	Infrastructure	Yes	37%
2	BullPenH2	00 02 2D 8A E0 36	11	Infrastructure	No	35%
3	HomeNetwork	00 09 5B DD 2A FC	11	Infrastructure	No	34%
4	tcin_home	00 09 5B FB 78 3A	11	Infrastructure	Yes	34%

Refresh Close

**Step 6** Click **Save** to save the settings.

**Step 7** Click on **Management** and go to **Wireless**. Verify that the **Connection Mode** is **Infrastructure** and the **Link** is **Yes**. Also verify that the SSID matches the SSID of your wireless router.

The screenshot shows the web interface of the AIRLINK 101 PRINT SERVER. The top navigation bar includes 'Management', 'Configuration', 'Tools', and 'Help'. The 'Management' section is active, with a sidebar listing 'System', 'Wireless', 'Network', and 'User'. The 'Wireless Status' page is displayed, showing the following details:

Wireless Status	
Connection Mode	: Infrastructure
Link	: Yes
SSID	: default (MAC : 00 03 1B 56 52 5D)
Channel	: 11
Transmission Rate	: 54M bps
WEP Encryption	: Disable
Tx Packets	: 0
Tx Errors	: 0
Rx Packets	: 0
Rx Errors	: 0

A red box highlights the 'Connection Mode', 'Link', and 'SSID' fields. A 'Refresh' button is located at the bottom of the status table.

**Note:** If the **Link** does not say **Yes**, click on the **Refresh** button until it displays **Yes**.

Also, if you have enabled encryption on your router, you will also need to set the identical encryption settings on the Print Server. For more information regarding how to set the encryption settings, please refer to the user's manual on the provided CD.

**Step 8** Verify your wireless connection with the steps outlined in **Section 5, Verifying Network Connection**.

**You have successfully configured the Print Server for wireless printing in Infrastructure mode.**

## 8.2 Ad-Hoc Mode Printing

If you want to print directly to the Print Server (bypassing the wireless router), follow the steps below. You should use a wired connection to configure the following wireless settings before unplugging the network cable from the Print Server.

**Note:** Your wireless computer may lose Internet connection if you set it to print directly to the Print Server.

**Step 1** Go to **Configuration, Wireless**, and set the **Connection Mode** to **Ad-Hoc**.

The screenshot displays the configuration page for the AIRLINK 101 PRINT SERVER. The interface has a top navigation bar with 'Management', 'Configuration', 'Tools', and 'Help'. The 'Configuration' section is active, and the 'Wireless' tab is selected in the left sidebar. The main content area is titled 'Wireless Interface' and contains the following settings:

- Connection Mode:** Two radio buttons are present: 'Infrastructure' (unselected) and 'Ad-Hoc' (selected). This section is highlighted with a red rectangle.
- SSID:** A text field containing 'default' with a dropdown arrow on the right. A note '(Manually Input or Select from List)' is to the right of the field.
- Wireless Channel:** A dropdown menu showing '11'.
- Transmission Rate:** A dropdown menu showing 'Fully Automatic'.
- Site Survey:** A button located below the channel and rate settings.
- WEP Encryption:** A section with three radio buttons: 'Disable' (selected), '64 bits', and '128 bits'.
- WEP Key Format:** Two radio buttons: 'ASCII' (unselected) and 'HEX' (selected).
- Key 1, Key 2, Key 3, Key 4:** Four empty text input fields for WEP keys.
- Encrypt Data Transmissions Using:** A dropdown menu showing 'Key 1'.
- Advanced Setting:** A section with three settings:
  - Beacon Interval:** A text field with '100' and '(ms)' to its right.
  - Preamble:** Two radio buttons: 'Long' (selected) and 'Short'.
  - Authentication Type:** Three radio buttons: 'Open System' (unselected), 'Shared Key' (unselected), and 'Both' (selected).

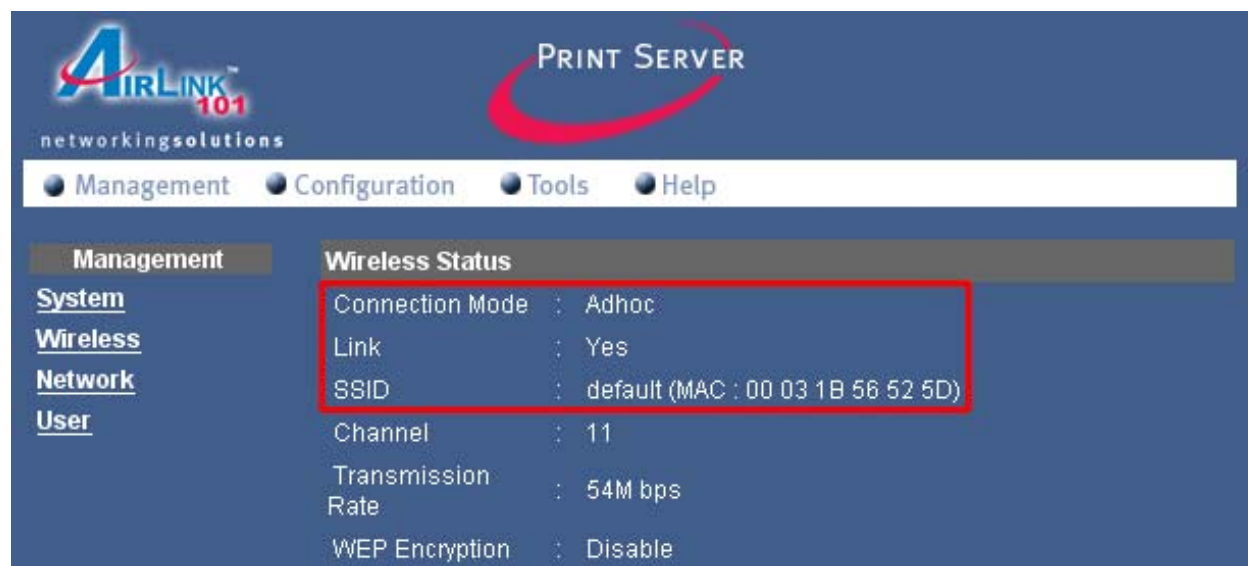
At the bottom of the page are 'Save' and 'Cancel' buttons.

**Step 2** Rename the **SSID** of the Print Server or keep it as **default**.

**Step 3** Set the desired **Wireless Channel**.

**Step 4** Click **Save**.

**Step 5** Click on **Management** and go to **Wireless**. Verify that the **Connection Mode** is **Ad-Hoc** and the **Link** is **Yes**. Also verify that the SSID matches the SSID you have set.



**Note:** If the **Link** does not say **Yes**, click on the **Refresh** button until it displays **Yes**.

**Step 6** Manually change the TCP/IP setting of your wireless computer to use a static IP address and assign the appropriate **IP Address**, **Subnet Mask**, and **Default Gateway** according to your network. If you do not know how to do this, it is recommended that you do not print directly to the Print Server, but print through the wireless router instead.

**Step 7** Configure your wireless adapter to **Ad-Hoc** mode, using the same **SSID** and **Channel** number as the Print Server.

**Note:** If you have enabled encryption on your wireless network adapter, you will also need to set the identical encryption settings on the Print Server. For more information regarding how to set the encryption settings, please refer to the user's manual on the provided CD.

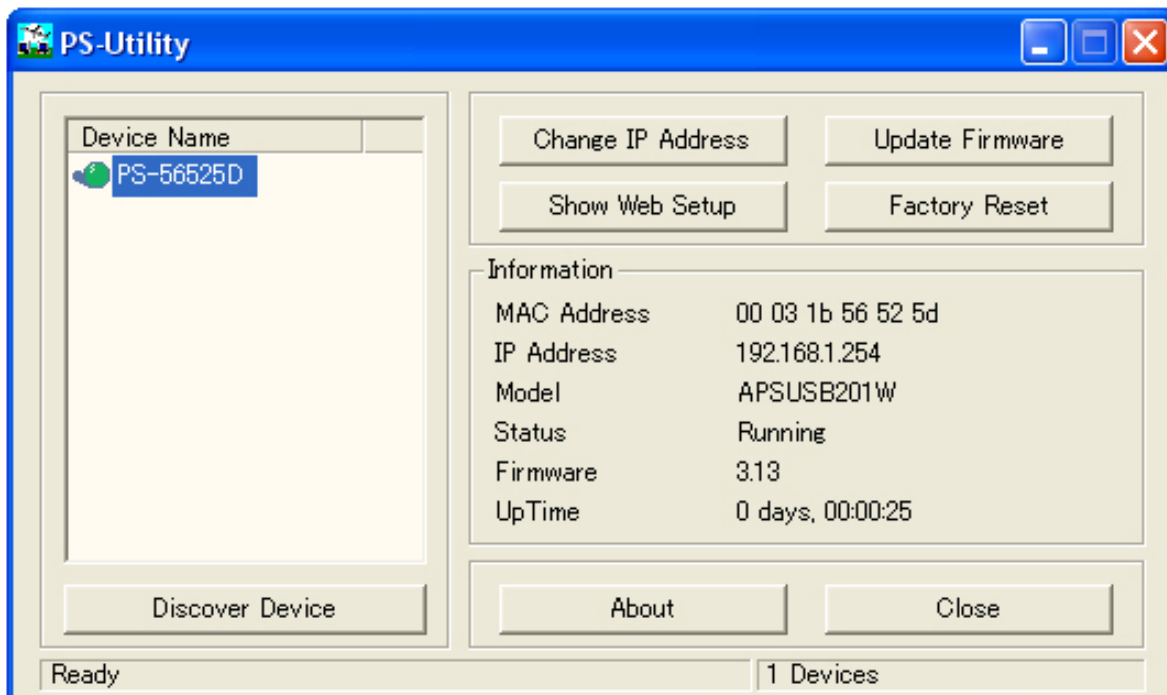
**You have successfully configured the Print Server for wireless printing in Ad-Hoc mode.**

## 9. Using the PS Utility

**PS Utility** is a user-friendly program that allows you to configure some basic functions of the Print Server such as performing a factory reset or updating the firmware. To access the complete management features of the Print Server, you'll need to use the **Web Configuration Utility**, which is described in the next section.

**Note:** If you haven't installed **PS Utility** yet, please follow the installation instructions as described in **Section 3, Installing PS Utility**.

You can start PS Utility by going to **Start, (All) Programs, PS Utility, PS Utility v2.00**.



**Device Name:** Lists any Print Server that is connected on your network.

**Information:** Displays the basic information for the selected Print Server.

**Discover Device:** Click on this button to automatically search for any Print Server that is connected to your network.

**Change IP Address:** Click on this button to change the IP Address and other TCP/IP settings for the Print Server.

**Update Firmware:** Click on this button to update the Print Server's firmware.

**Note:** You must download the updated firmware from [www.airlink101.com](http://www.airlink101.com) first.

**Show Web Setup:** Click on this button to display the **Web Configuration Utility**.

**Factory Reset:** Click on this button to reset the Print Server back to factory settings.

**About:** Click on this button to display the version number of the PS Utility.

**Close:** Click on this button to close PS Utility.

## 10. Using the Web Configuration Utility

The **Web Configuration Utility** allows you to manage the full features of the Print Server with an easy-to-use user interface.

You can start the **Web Configuration Utility** in two ways:

1. Click on the **Show Web Setup** button in **PS Utility**.

or

2. Open your web browser, type in the IP address of the Print Server in the URL address field, and press **Enter**. (Default IP address is **192.168.1.254**).

The **Web Configuration Utility** will display the **Management, System** page.

Click on any of the links to display the corresponding page.

The screenshot shows the web configuration utility for the AIRLINK 101 PRINT SERVER. The interface has a dark blue header with the AIRLINK 101 logo and the text 'networkingsolutions' and 'PRINT SERVER'. Below the header is a navigation bar with tabs: Management (selected), Configuration, Tools, and Help. The main content area is divided into several sections:

- Management**: A sidebar with links for System, Wireless, Network, and User.
- Device Status**: A table showing server information.

Server Name	: PS-56525D
Model	: APSUSB201W
Firmware Version	: 3.13 (2004-11-08)
MAC Address	: 00 03 1B 56 52 5D
IP Address	: 192.168.1.254 (Manual)
Up Time	: 0 days, 00:03:12
- Printer Status**: A table showing printer information.

USB	Printer Name	: PS-56525D-U1
	Printer Speed	: Full Speed (12M bps)
	Printer Status	: On line
	Total Print Jobs	: 0
	Total Print Size	: 0 KBytes
	Printing Status	: Idle
	Name	:
	MAC	:
	IP	:
	Protocol	:
	Spooling Size	: 0 Bytes
	Printing Size	: 0 Bytes
- Ethernet Status**: A table showing network information.

Link	: Yes
Speed	: 100M bps
Full Duplex	: Yes
Tx Packets	: 126
Tx Errors	: 0
Rx Packets	: 36
Rx Errors	: 0

At the bottom of the interface is a 'Refresh' button.

## 10.1 Management

### System

The **System** page displays basic information about the Print Server.

The screenshot shows the web interface of the AIRLINK 101 PRINT SERVER. The top navigation bar includes 'Management', 'Configuration', 'Tools', and 'Help'. The 'Management' section is active, with a sidebar containing 'System', 'Wireless', 'Network', and 'User'. The main content area displays the 'Device Status' and 'Printer Status' sections. The 'Device Status' section lists: Server Name (PS-56525D), Model (APSUSB201W), Firmware Version (3.13 (2004-11-08)), MAC Address (00 03 1B 56 52 5D), IP Address (192.168.1.254 (Manual)), and Up Time (0 days, 00:03:12). The 'Printer Status' section lists: USB Printer Name (PS-56525D-U1), Printer Speed (Full Speed (12M bps)), Printer Status (On line), Total Print Jobs (0), Total Print Size (0 KBytes), Printing Status (Idle), Name, MAC, IP, Protocol, Spooling Size (0 Bytes), and Printing Size (0 Bytes). The 'Ethernet Status' section lists: Link (Yes), Speed (100M bps), Full Duplex (Yes), Tx Packets (126), Tx Errors (0), Rx Packets (36), and Rx Errors (0). A 'Refresh' button is located at the bottom of the page.

Device Status	
Server Name	: PS-56525D
Model	: APSUSB201W
Firmware Version	: 3.13 (2004-11-08)
MAC Address	: 00 03 1B 56 52 5D
IP Address	: 192.168.1.254 (Manual)
Up Time	: 0 days, 00:03:12

Printer Status	
USB	Printer Name : PS-56525D-U1
	Printer Speed : Full Speed (12M bps)
	Printer Status : On line
	Total Print Jobs : 0
	Total Print Size : 0 KBytes
	Printing Status : Idle
	Name :
	MAC :
	IP :
	Protocol :
	Spooling Size : 0 Bytes
	Printing Size : 0 Bytes

Ethernet Status	
Link	: Yes
Speed	: 100M bps
Full Duplex	: Yes
Tx Packets	: 126
Tx Errors	: 0
Rx Packets	: 36
Rx Errors	: 0

Click on **Refresh** to update the page.



## Wireless

The Wireless page displays the status of your wireless network.

The screenshot shows the web interface of the AIRLINK 101 PRINT SERVER. The header includes the AIRLINK 101 logo and the text 'networkingsolutions' and 'PRINT SERVER'. Below the header is a navigation bar with links: Management, Configuration, Tools, and Help. The 'Management' section is active, showing a sidebar with links: System, Wireless, Network, and User. The main content area displays the 'Wireless Status' page with the following information:

Connection Mode	: Infrastructure
Link	: Yes
SSID	: default (MAC : 00 03 1B 56 52 5D)
Channel	: 11
Transmission Rate	: 54M bps
WEP Encryption	: Disable
Tx Packets	: 0
Tx Errors	: 0
Rx Packets	: 0
Rx Errors	: 0

At the bottom of the status area is a 'Refresh' button.

Click on **Refresh** to update the page.



## Network

The **Network** page displays the status of your local area network.

**AIRLINK 101**  
networkingsolutions

**PRINT SERVER**

Management Configuration Tools Help

**Management**

System  
Wireless  
**Network**  
User

**Auto IP**

DHCP/BOOTP	:	Disable	(IP : 0.0.0.0)
UPnP	:	Enable	(IP : 192.168.1.101)
MAC Rendezvous	:	Enable	(IP : 169.254.146.152)

**TCP/IP Printing**

LPR Printing	:	Status	:	Running
		Total Print Jobs	:	0
		Total Print Size	:	0 KBytes
Port (9100) Printing	:	Status	:	Running
		Total Print Jobs	:	0
		Total Print Size	:	0 KBytes
IPP Printing	:	Status	:	Running
		Total Print Jobs	:	0
		Total Print Size	:	0 KBytes
FTP Printing	:	Status	:	Running
		Total Print Jobs	:	0
		Total Print Size	:	0 KBytes
E-mail Printing	:	Status	:	Running
		Total Print Jobs	:	0
		Total Print Size	:	0 KBytes

**Microsoft Network Printing**

SMB (Over NetBEUI) Printing	:	Status	:	Running
		Total Print Jobs	:	0
		Total Print Size	:	0 KBytes
SMB (Over NBT) Printing	:	Status	:	Running
		Total Print Jobs	:	0
		Total Print Size	:	0 KBytes

**MAC AppleTalk Printing**

AppleTalk Printing	:	Status	:	Running
		Total Print Jobs	:	0
		Total Print Size	:	0 KBytes

Refresh

Click on **Refresh** to update the page.

## User

The **User** page displays the **Users Printing-Log**, which shows which users have submitted print jobs through the Print Server.



Click on **Refresh** to update the page.

## 10.2 Configuration

Click on **Configuration** to display the Configuration page.

### System

The **System** page allows you to configure basic settings of the Print Server.

The screenshot shows the configuration interface for the AIRLINK 101 PRINT SERVER. The top navigation bar includes 'Management', 'Configuration' (selected), 'Tools', and 'Help'. The left sidebar lists 'System' (selected), 'Wireless', 'Network', 'User', 'E-mail', and 'SNMP'. The main content area is titled 'System Device' and contains the following fields:

Server Name	:	PS-56525D
Location	:	
Admin Contact	:	
Password	:	New Password : <input type="text"/>
	:	Confirm Again : <input type="text"/>

Below the 'System Device' section is the 'Port Setting' section:

USB	:	Port Name	:	PS-56525D-U1
	:	Description	:	<input type="text"/>
	:	PJL Printer	:	No <input type="button" value="v"/>

At the bottom of the form are 'Save' and 'Cancel' buttons.

**Server Name:** You can rename the Print Server to a more user-friendly name or keep the factory default name.

**Location:** You can make note of where the Print Server is located (optional).

**Admin Contact:** Name of the administrator to contact for help (optional).

**Password:** You can set a password for the **Web Configuration Utility** so only authorized personnel can access and change the Print Server's configuration.

**USB Port Name:** You can rename the Print Server's port name to a more user-friendly name or keep the factory default name.

**Description:** Describe the printer that is attached to the Print Server (optional).

**PJL Printer:** Choosing **Yes** will enable the support for Hewlett-Packard PJP (Printer Job Language) standard for bi-directional printing. (Default is **No**).

Click **Save** to save and activate any configuration changes. Click **Cancel** to cancel the changes.

## Wireless

The **Wireless** page allows you to configure the wireless settings of the Print Server.

The screenshot shows the configuration interface for the AIRLINK 101 PRINT SERVER. The top navigation bar includes links for Management, Configuration, Tools, and Help. The left sidebar lists various configuration categories: System, Wireless, Network, User, E-mail, and SNMP. The main content area is titled 'Wireless Interface' and contains several settings:

- Connection Mode:** Radio buttons for Infrastructure (selected) and Ad-Hoc.
- SSID:** A text field containing 'default' with a note '(Manually Input or Select from List)' and a dropdown menu also set to 'default'. A 'Site Survey' button is located below.
- Wireless Channel:** A dropdown menu set to '11'.
- Transmission Rate:** A dropdown menu set to 'Fully Automatic'.

Below the Wireless Interface section is the **WEP Encryption** section:

- WEP Encryption:** Radio buttons for Disable (selected), 64 bits, and 128 bits.
- WEP Key Format:** Radio buttons for ASCII and HEX (selected).
- Key 1, Key 2, Key 3, Key 4:** Four empty text input fields for WEP keys.
- Encrypt Data Transmissions Using:** A dropdown menu set to 'Key 1'.

The bottom section is **Advanced Setting**:

- Beacon Interval:** A text field with '100' and '(ms)' next to it.
- Preamble:** Radio buttons for Long (selected) and Short.
- Authentication Type:** Radio buttons for Open System, Shared Key, and Both (selected).

At the bottom of the page are 'Save' and 'Cancel' buttons.

## Wireless Interface

**Connection Mode:** Select one of the two connection modes.

- **Infrastructure** (default) – Connects to a wireless AP or router in a WLAN.
- **Ad-Hoc** – Connects directly to wireless clients in a peer-to-peer mode.

**Note:** For Ad-Hoc mode, all clients including the Print Server must use the same SSID and channel number to establish proper connection. In addition, if WEP is enabled, all clients and Print Server must use the identical WEP key and key number.

- **SSID:** Assign the SSID in this box. You can manually input the name or select one from the drop-down menu. To search for any available wireless AP within the network, click the **Site Survey** button.
- **Wireless Channel:** Select the channel from the drop-down menu. The default channel is **11**.
- **Transmission Rate:** Select the data transmission rate from the drop-down menu. The default setting is **Fully Automatic**.

## WEP Encryption

This field allows you to configure the settings of data encryption. Please remember that the WEP key must be set before the data encryption is enforced.

- **WEP Encryption:** This option allows you to select **Disable**, **64 bits**, and **128 bits** for the encryption setting.
- **WEP Key Format:** You can decide the network key to be encoded by **ASCII** (all letters and numbers) or **HEX** (0-9, A-F).
- **64-bit** (10 Hex/5 ASCII characters), **128-bit** (26 Hex/13 ASCII characters).

Then, enter the key(s) for the network in the **Key** box (1~4). The WEP encryption must be the same for all wireless devices on your network.

## Advanced Setting

This field allows you to configure more settings, including:

- **Beacon Interval:** Enter the number of beacon interval time in milliseconds.
- **Preamble:** This option allows you to set the length of preamble. Setting options are: **Long** - it is set to 144 bits; **Short** - it is set to 72 bits.
- **Authentication Type:** You can set the authentication type by selecting the settings: **Open System**, **Shared Key**, and **Both**.

Click **Save** to save and activate any configuration changes. Click **Cancel** to cancel the changes.

## Network

The **Network** page allows you to configure various network settings of the Print Server.

**AIRLINK 101**  
networkingsolutions

**PRINT SERVER**

Management Configuration Tools Help

**Configuration**

**System**  
**Wireless**  
**Network**  
**User**  
**E-mail**  
**SNMP**

**TCP/IP**

IP Address : ☒ Manually Assign  
IP Address : 192.168.1.254  
Subnet Mask : 255.255.255.0  
Default Gateway : 192.168.1.1

☐ Automatically Assign

DNS Server Address : 1. 0.0.0.0  
2. 0.0.0.0

UPnP : ☒ Enable ☐ Disable  
MAC Rendezvous : ☒ Enable ☐ Disable  
Second HTTP Port : ☐ Enable ☒ Disable  
Port Number : 0  
(For Remote Web Configuration and IPP Printing)

**Microsoft Network**

Workgroup : WORKGROUP

**AppleTalk**

AppleTalk Zone : \*

USB : Chooser Name : PS-56525D-U1  
Printer Type : LaserWriter  
PostScript Level : Level 2  
Font Group : Standard 35

Save Cancel

### TCP/IP

**Manually Assign:** Choose to manually assign an IP address for the Print Server **(strongly recommended)**, or to obtain an IP address automatically.

**IP Address:** Assign an IP address for the Print Server or keep the default.

**Subnet Mask:** Assign a Subnet Mask for the Print Server or keep the default.

**Default Gateway:** Assign a Default Gateway for the Print Server or keep the default.

**DNS:** Enter up to two DNS Servers' IP Address (optional)

**UPnP:** Choose to Enable or Disable Universal Plug and Play.

**MAC Rendezvous:** Choose to Enable or Disable Mac Rendezvous.

**Second HTTP Port:** Choose to Enable or Disable a second http port for remote web configuration and IPP printing. If enabled, enter the second port number.

## **Microsoft Network**

**Workgroup:** Enter the name of your workgroup.

## **AppleTalk**

**AppleTalk Zone:** Enter the name of your AppleTalk Zone.

**USB:** Enter your printer type.

**PostScript Level:** Select your PostScript level.

**Font Group:** Select your Font Group.

Click **Save** to save and activate any configuration changes. Click **Cancel** to cancel the changes.

## User

The **User** page allows you to define which users can access the Print Server.

**Configuration**

**Printing Control**

Enable User Printing Control : ☐ Yes ☒ No

Allow Undefined Users Printing : ☐ Yes ☒ No

**Define Users**

Add User : User Name :

MAC Address :

Printing Access : ☒ Yes ☐ No

Delete User :

User List : Name MAC Printing Access

### Printing Control

By configuring the **Enable User Printing Control** option (**Yes** or **No**), the user in the User List is permitted to access the print server or not. For the user(s) who is not in the User List, you can also limit the access right by setting the **Allow Undefined Users Printing** option to **Yes** or **No**.

### Define Users

You can add/delete the user(s) to/from the User List. The User List at the bottom of the screen displays the current defined user and related information for the Print Server.

Click **Save** to save and activate any configuration changes. Click **Cancel** to cancel the changes.



## E-mail

The **E-mail** page allows you to set up e-mail alerts and e-mail printing.

The screenshot shows the web interface of the AIRLINK 101 PRINT SERVER. The top navigation bar includes 'Management', 'Configuration' (selected), 'Tools', and 'Help'. The left sidebar lists 'System', 'Wireless', 'Network', 'User', 'E-mail' (selected), and 'SNMP'. The main content area is titled 'E-mail Account' and contains the following fields:

- Print Server E-mail Address : [text box]
- Incoming E-mail (POP3) Server Address : [text box]
- Outgoing E-mail (SMTP) Server Address : [text box]
- Account Name : [text box]
- Password : [text box]

Below the 'E-mail Account' section is the 'E-mail Notification' section, which includes:

- Enable e-mail notification for printer status changing : ☐ Yes ☒ No
- Notification e-mail will be sent to Admin's e-mail address.
- Admin E-mail Address : [text box] (Use ',' to separate multiple e-mail address)

At the bottom is the 'E-mail Printing' section, which includes:

- E-mail Printing (ASCII Text Only) : ☒ Enable ☐ Disable
- Receive E-mail Interval : 15 (minutes)

At the bottom of the form are 'Save' and 'Cancel' buttons.

### **E-mail Account**

You can assign an E-mail address to the Print Server so that your mail can be printed out directly (ASCII text only). To enable this function, enter the E-mail account in the **Print Server E-mail Address** box.

- **Incoming E-mail (POP3) Server Address:** Enter the server address that is used to receive your E-mail.
- **Outgoing E-mail (SMTP) Server Address:** Enter the server address that is used to send your E-mail.

If your mail server needs to verify the user when sending E-mail, you have to input the **Account Name** and **Password**.

### **E-mail Notification**

You can set the Print Server to send an E-mail alert message when the printer status changes. To enable this function, set the **Enable e-mail notification for printer status changing** option to **Yes**. Then, input the administrator's E-mail address in the **Admin E-mail Address** field.

## E-mail Printing

- **E-mail Printing (ASCII Text Only):** Select **Enable** to enable the E-mail printing function.
- **Receive E-mail Interval:** Enter the number in this box to set up the time (in minutes) to check/receive E-mails regularly.

Click **Save** to save and activate any configuration changes. Click **Cancel** to cancel the changes.

## SNMP

SNMP (Simple Network Management Protocol) is a set of protocols for managing complex networks.

The screenshot shows the 'AIRLINK 101 PRINT SERVER' configuration interface. The 'Configuration' tab is selected, and the 'SNMP Management' section is active. On the left, a sidebar lists configuration categories: System, Wireless, Network, User, E-mail, and SNMP. The main area displays three community configurations. Community 1 is pre-filled with 'public' and 'Read/Write' access. Communities 2 and 3 have empty name fields and 'Read Only' access rights. 'Save' and 'Cancel' buttons are at the bottom.

Community	Name	Access Right
Community 1	public	Read/Write
Community 2		Read Only
Community 3		Read Only

**Community 1/2/3:** Enter a name in the **Name** box, and configure the **Access Right** by selecting **Read Only** or **Read/Write** from the drop-down menu.

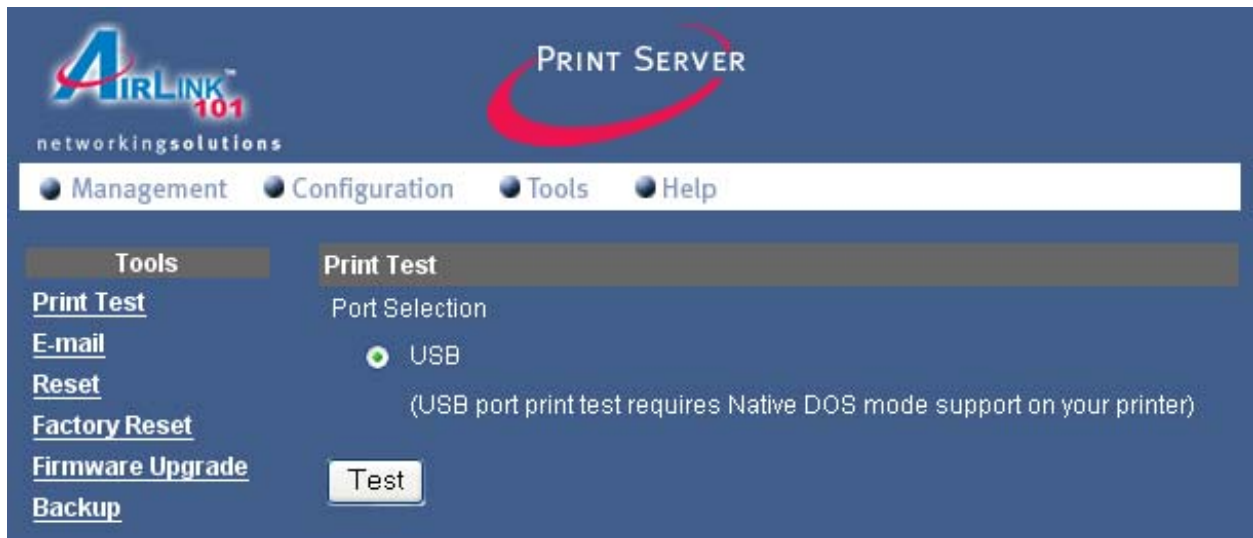
Click **Save** to save and activate any configuration changes. Click **Cancel** to cancel the changes.

## 10.3 Tools

Click on **Tools** to display the Tools page.

### Print Test

The **Print Test** page allows you to perform a low-level print test, which bypasses the operating system layer. The test page is sent directly from the Print Server to the printer. This allows you to test the compatibility of your printer with the Print Server.



Select the port that the printer is connected to and click on the **Test** button.

Your printer should print out a test page. If not, verify that the printer is powered on and all cables are securely connected and try again. If the printer still fails to print a test page, please check the printer compatibility list on our web site at [www.airlink101.com](http://www.airlink101.com) for a list of compatible printers. If your printer is not on the list, it may not be compatible with the Print Server.

## E-mail

The screenshot shows the web interface of the AIRLINK 101 PRINT SERVER. At the top, there is a logo for AIRLINK 101 networkingsolutions and the text PRINT SERVER. Below the logo, there is a navigation bar with four tabs: Management, Configuration, Tools, and Help. The Tools tab is selected. On the left side, under the Tools tab, there is a list of options: Print Test, E-mail, Reset, Factory Reset, Firmware Upgrade, and Backup. The E-mail option is selected. On the right side, there are two sections. The first section is titled 'Test E-mail Account' and contains the text: 'E-mail test will send an e-mail to Admin's e-mail address. Do you want to test e-mail account?' Below this text is a button labeled 'Test'. The second section is titled 'Receive E-mail' and contains the text: 'Do you want to receive e-mail and print out?' Below this text is a button labeled 'Yes'.

### **Test E-mail Account**

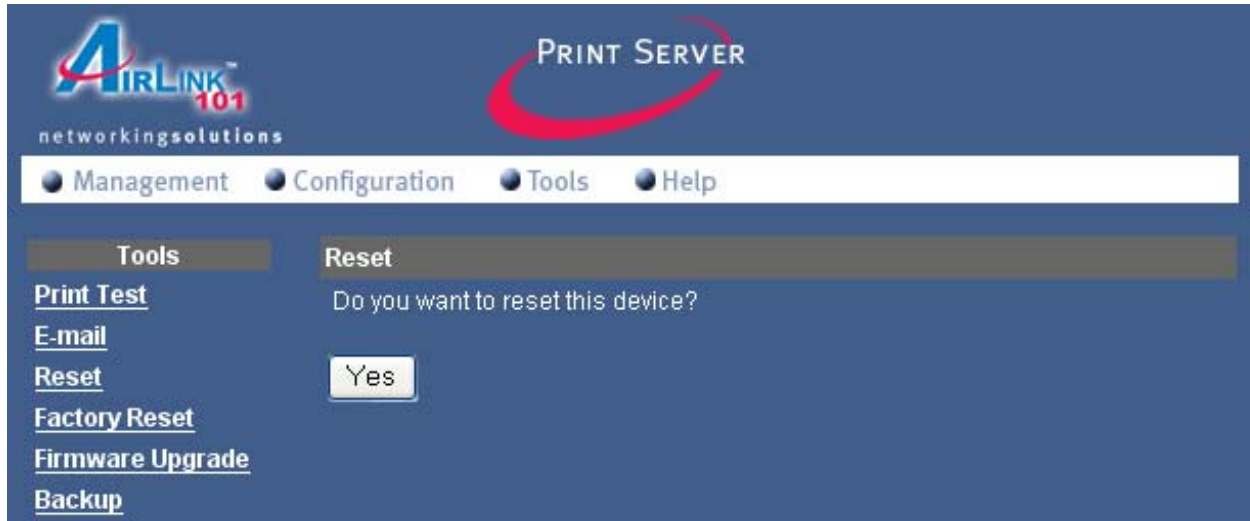
Click **Test** to send a test E-mail message to the given administrator's E-mail address.

### **Receive E-mail**

Click **Yes** to immediately check and receive E-mail, and then print out the mail when available.

## **Reset**

The **Reset** page lets you reset the Print Server without changing the setting back to factory default.



Click on the **Yes** button to reset the Print Server.

## **Factory Reset**

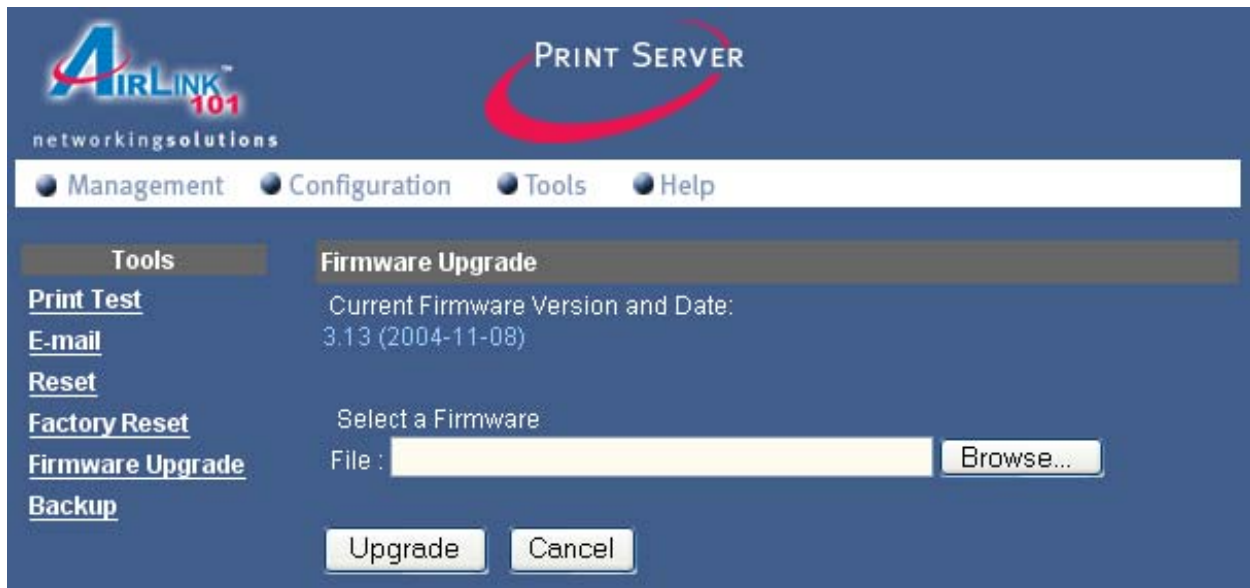
The **Factory Reset** page lets you reset the Print Server's setting back to factory default.



Click on the **Yes** button to perform a factory reset on the Print Server.

## Firmware Upgrade

When a new version of the firmware is available on our web site, [www.airlink101.com](http://www.airlink101.com), you can download the new firmware and proceed to the following page to upgrade the firmware.



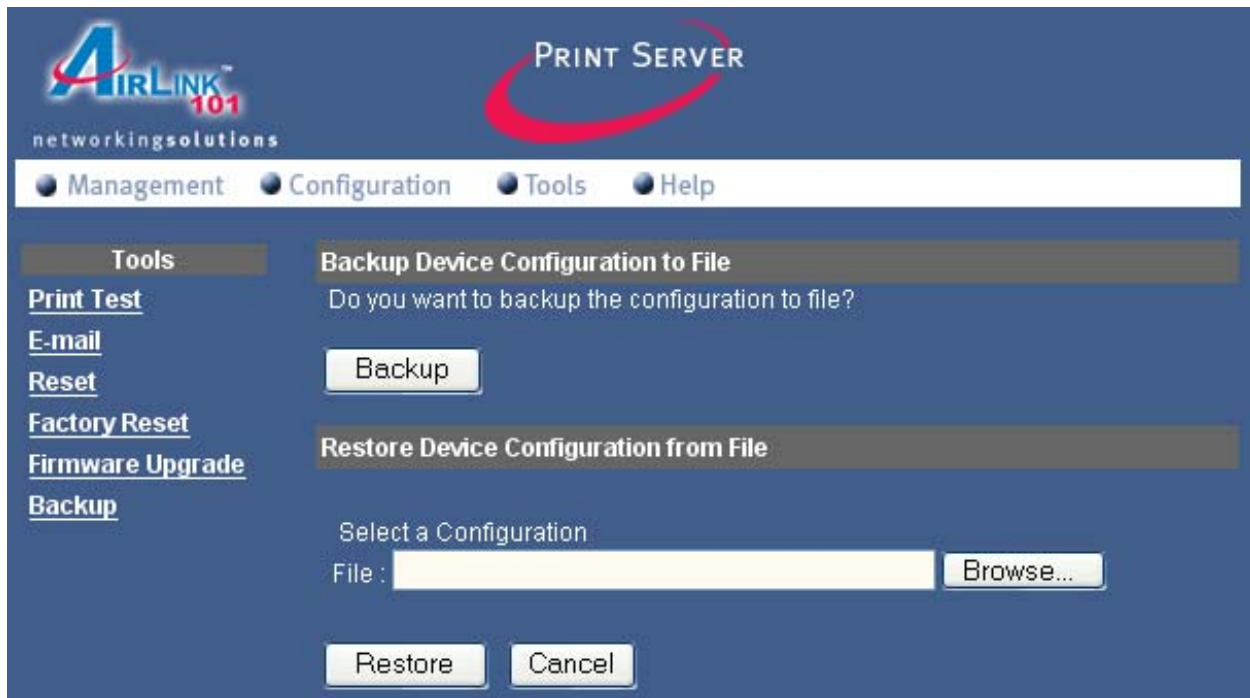
The screenshot shows the AIRLINK 101 PRINT SERVER web interface. The top header includes the AIRLINK 101 logo and the text 'networkingsolutions' and 'PRINT SERVER'. Below the header is a navigation bar with links for Management, Configuration, Tools, and Help. The main content area is divided into two columns. The left column, under the 'Tools' tab, lists several options: Print Test, E-mail, Reset, Factory Reset, Firmware Upgrade, and Backup. The right column, titled 'Firmware Upgrade', displays the current firmware version and date as '3.13 (2004-11-08)'. It also features a 'Select a Firmware' section with a text input field labeled 'File :' and a 'Browse...' button. At the bottom of this section are 'Upgrade' and 'Cancel' buttons.

1. Click **Browse** and browse to the location of the downloaded firmware.
2. Click **Upgrade** to begin the upgrade process.

**Note:** you may need to unzip the downloaded file first.

## **Backup**

You may use the Backup feature to save the Print Server's configuration settings.



### **Backup Device Configuration to File**

Click **Backup** to backup your current configuration of the print server. The file will be saved as Config.cfg

### **Restore Device Configuration from File**

You can reload a configuration that you saved before. Click **Browse** to point to the backup file (Config.cfg), and then click **Restore**.

## ***10.4 Help***

Click on **Help** to display the Help page.

## **About**

The **About** page displays the Print Server's firmware version number.



## 11. Printing in Mac OS

This section describes how to set up your Mac OS settings to work with the Print Server.

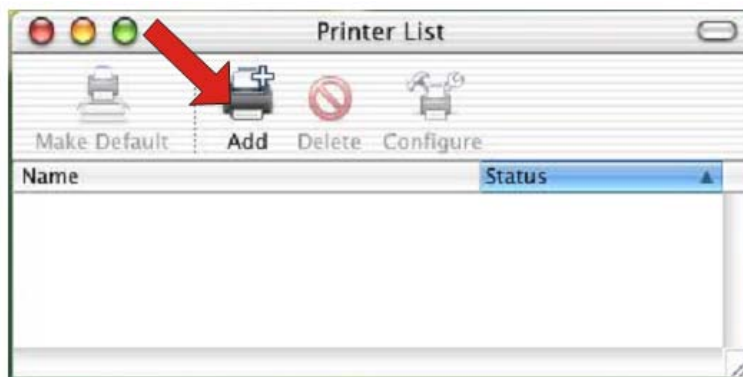
### 11.1 Using Rendezvous

Mac OS X provides a new feature called **Rendezvous**. Rendezvous is a networking technology standard that lets you create an instant network of computers and devices to share files and printers and even contact other people on the network.

For the printer connection, the Mac OS X Print Center application uses Rendezvous to discover Rendezvous-enabled printers on the network. When you add your computer to a network, Print Center automatically discovers any available printer. All you have to do is select the one you want to use and then start printing. You can add a new printer to the network and all the users on the network will see the new printer automatically appear in their Print Center without any configuration.

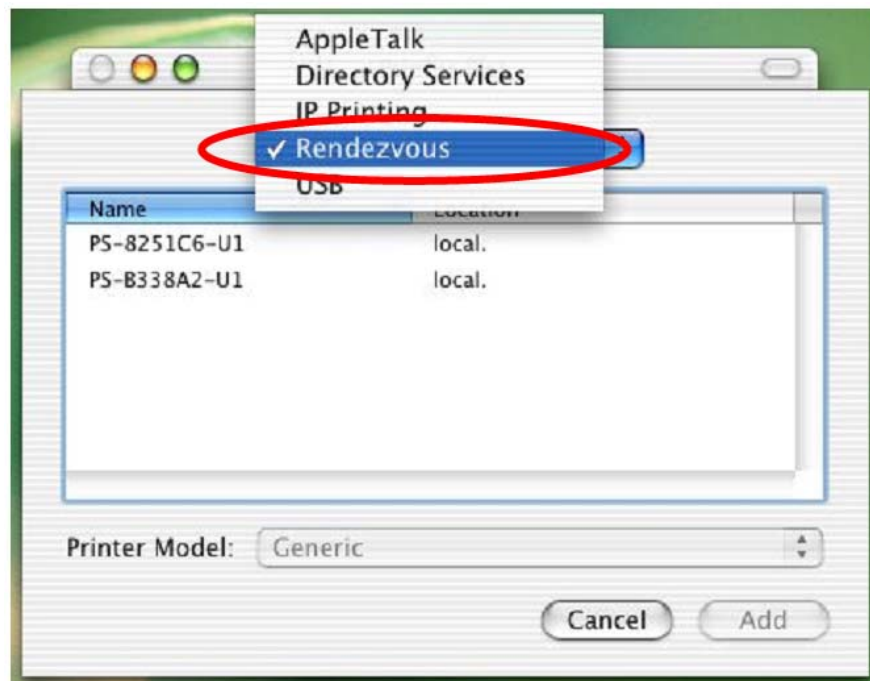
The following instructions provide a common way of using Rendezvous:

**Step 1** Launch **Print Center**. Press and hold the **Option** key and click the **Add** button.

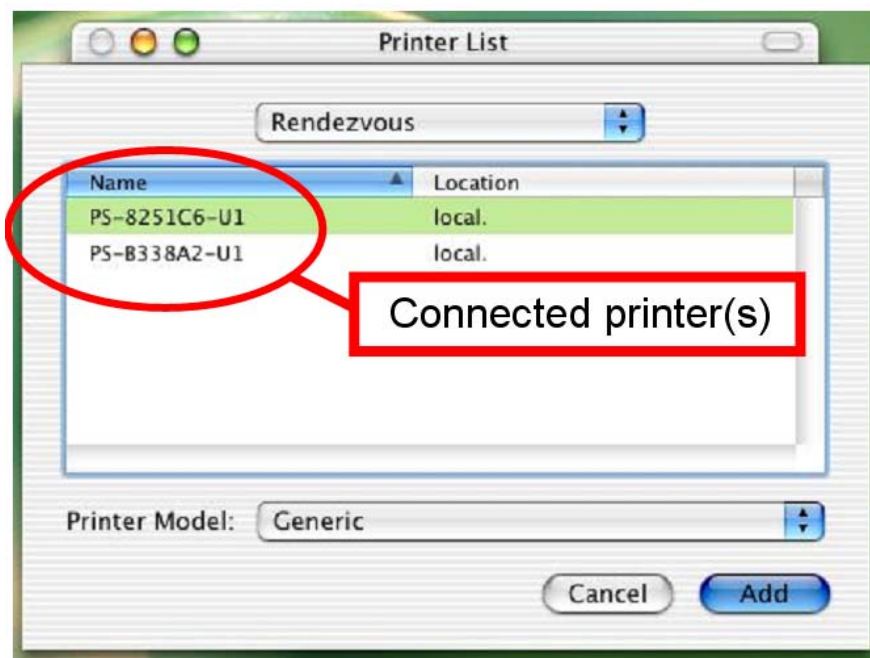




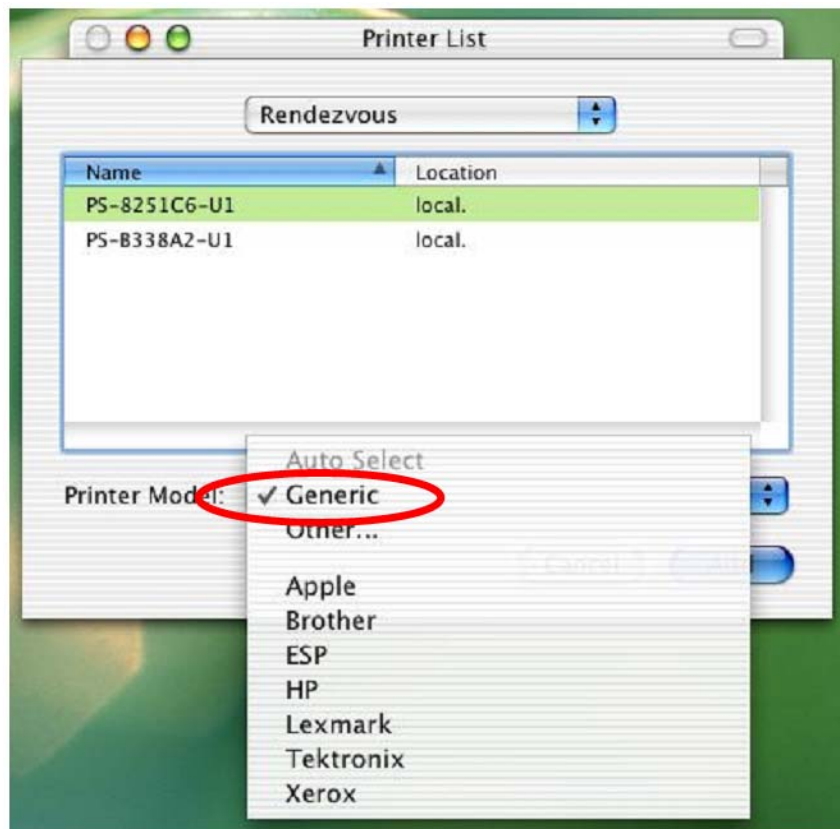
**Step 2** Select **Rendezvous** from the pop-up menu.



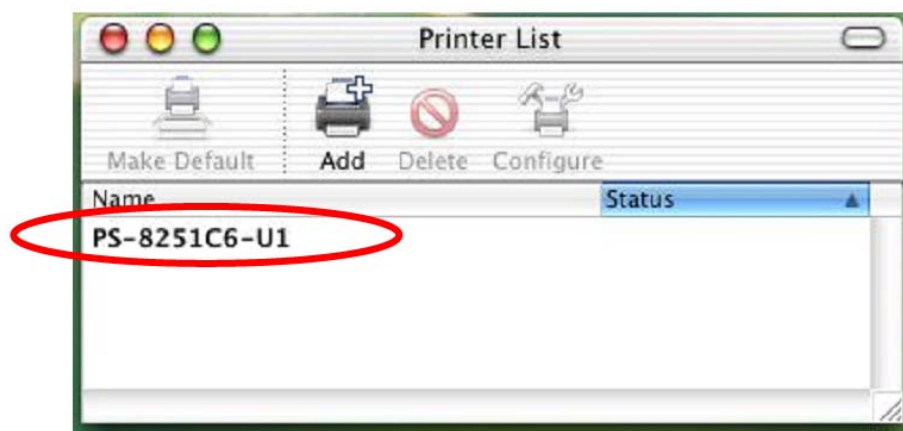
**Step 3** A list of Rendezvous-enabled printers will appear in the list.



**Step 4** Choose the desired printer and select **Generic**.



**Step 5** The printer is installed into the system successfully.



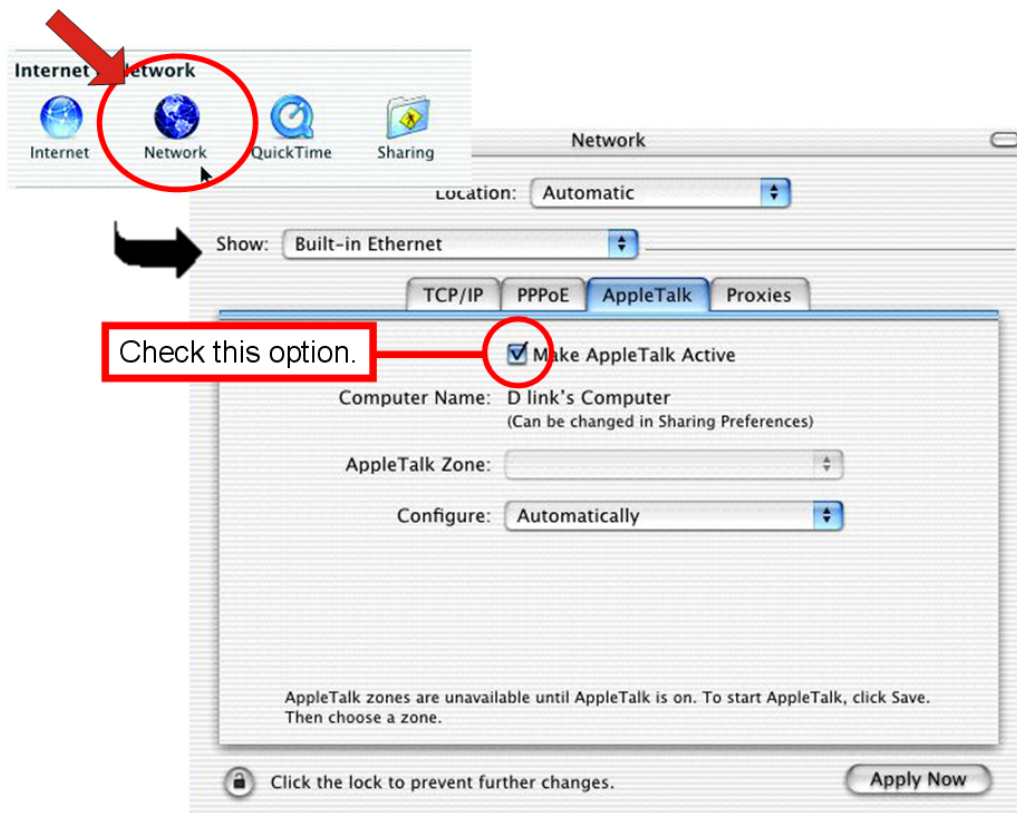
## 11.2 Setting AppleTalk/LPR Printing

If you want to use **AppleTalk** or **LPR printing** instead of **Rendezvous**, Follow the instructions below.

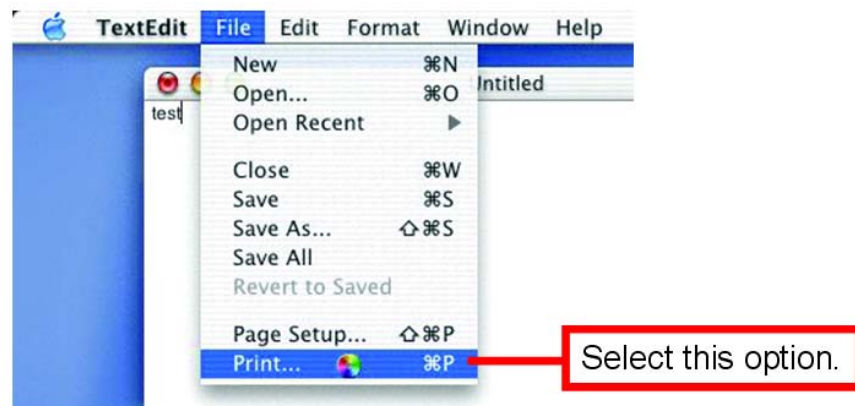
### For Mac OS X

**Step 1** After attaching the Print Server to your network, change the IP Address of your Macintosh computer in order to access the Print Server's Web Configuration Utility. The default IP Address of the Print Server is **192.168.1.254**. Change your IP Address to **192.168.1.x**, where **x** is any number between 2 and 200.

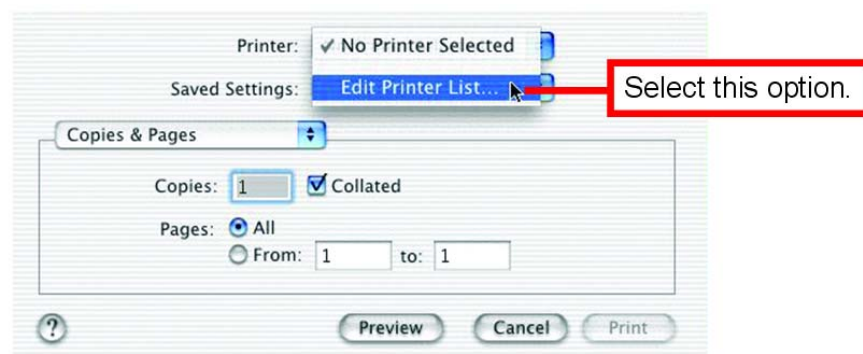
**Step 2** Open the **System Preference** window and click **Network**. In the Network window, select the **AppleTalk** tab and check the **Make AppleTalk Active** check box.



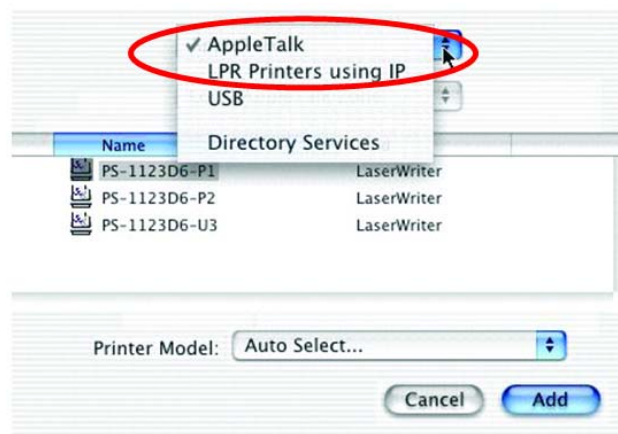
**Step 3** To print, open a document and select **File > Print** from the menu.



**Step 4** Select **Edit Printer List** from the **Printer** dialog box.

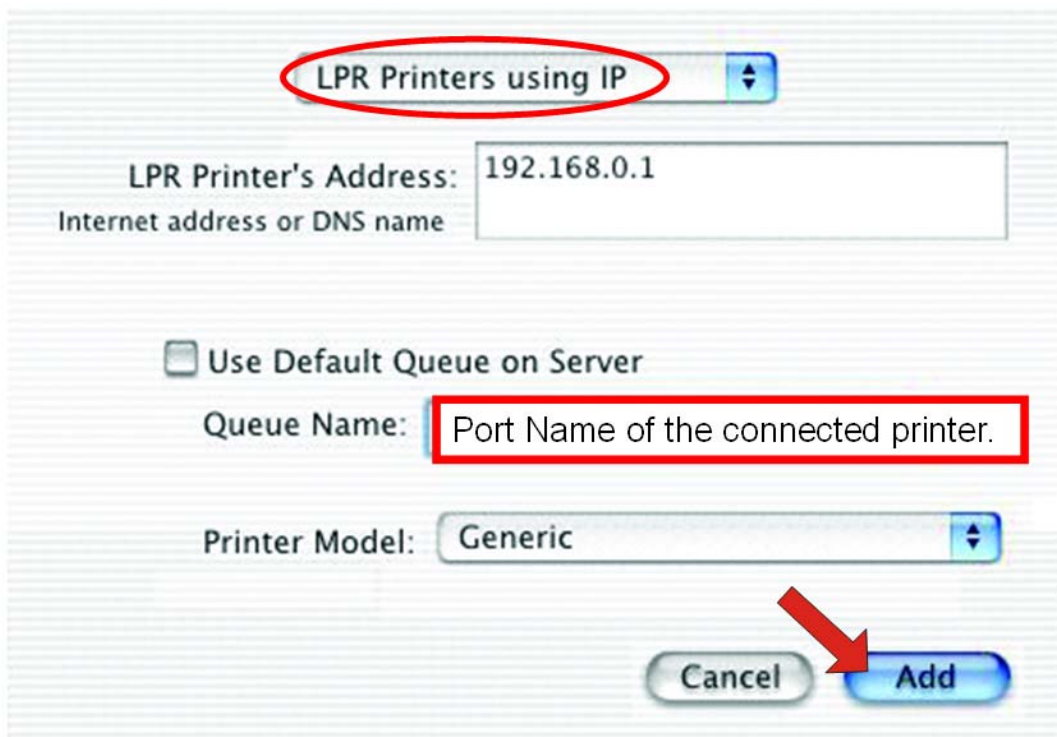


**Step 5** Click **Add Printer** and then select the desired printing protocol (**AppleTalk** or **LPR Printers using IP**).



**AppleTalk:** After selecting **AppleTalk**, the Port Name of the Print Server will be displayed. Select the Port to which the PostScript printer is connected. Then, select the printer model from the dialog box. Click **Add Printer** to complete the Printer Port configuration. Select the Printer Port just configured in the Print window. Click **Print** to print your document.

**LPR Printers using IP:** When you select **LPR Printers using IP** Protocol, type the IP Address of the Print Server into the **LPR Printer's Address** field. In the **Queue Name** field, type in the Print Server's port name that the PostScript printer is connected to. Select the printer model from the dialog box, and select the printer model from the pull-down menu. Click **Add** to complete the process. Close all Print Center windows and select the Printer Port that was just selected. Then, click **Print** to print the document.



The screenshot shows a configuration window titled "LPR Printers using IP". The title bar is circled in red. Below the title, there is a text field labeled "LPR Printer's Address:" with the value "192.168.0.1" entered. Below this field is the text "Internet address or DNS name". There is a checkbox labeled "Use Default Queue on Server" which is unchecked. Below the checkbox is a text field labeled "Queue Name:" with the value "Port Name of the connected printer." entered. Below this field is a pull-down menu labeled "Printer Model:" with "Generic" selected. At the bottom right, there are two buttons: "Cancel" and "Add". A red arrow points to the "Add" button.

## **For Mac OS 9**

If you use Mac OS 9, you can use the AppleTalk network protocol using the EtherTalk transport or a proprietary low-speed LocalTalk transport. Your Print Server can be used for network printing to PostScript printers. You can print from any Mac OS computer connected to your Ethernet network either directly using an EtherTalk connection or indirectly through a LocalTalk-to-EtherTalk router.

### **To set up the Print Server for AppleTalk printing:**

**Step 1** Please confirm that the AppleTalk protocol is enabled in your Macintosh computer.

**Step 2** Change the IP Address on one of the computers within your network to **192.168.1.x** (where **x** is any number between 2 - 200).

**Step 3** Type the Print Server's IP address into the address field of your web browser. (Default IP Address is **192.168.1.254**).

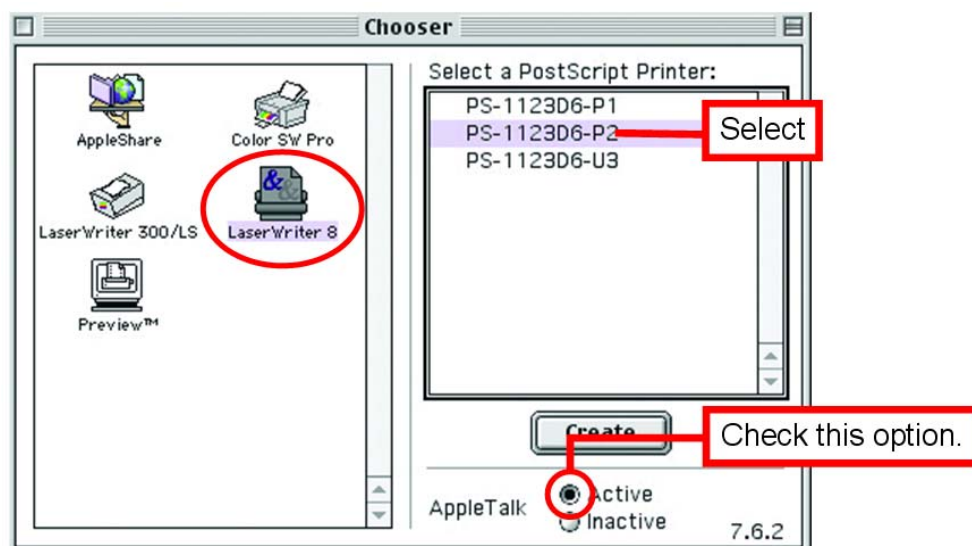
**Step 4** Click on **Configuration** and go to the **AppleTalk Protocol** page. If your AppleTalk network is divided into AppleTalk zones, you have to specify which zone the Print Server should be in. You should locate the Print Server in the same zone as most of the users who will be using it. If your network is not divided into zones, it should contain a single asterisk **“\*”**.

## To print from Mac OS Client Workstations:

**Note:** The actual settings of selecting a PostScript printer connected to your Print Server may be different from the instructions provided below depending on the devices and the software you are using.

**Step 1** Select **Chooser** from the Apple menu to choose a printer connected to the Print Server.

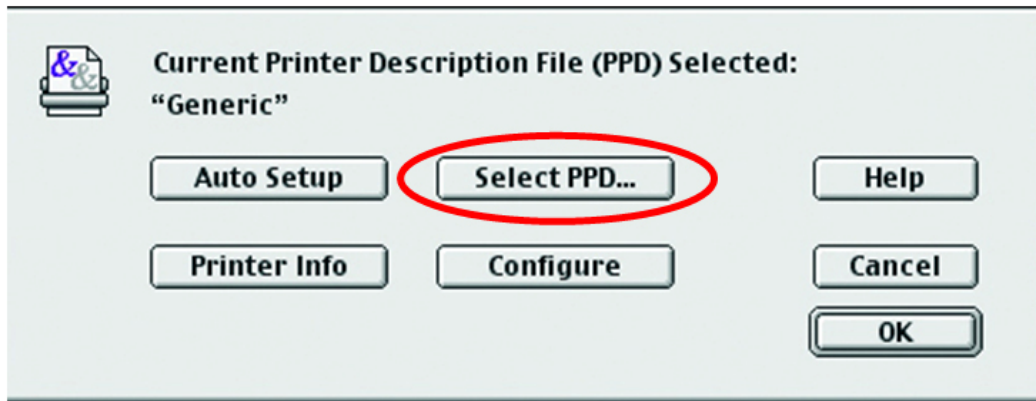
**Step 2** In the left column of the **Chooser** window, select the desired printer. Please confirm that AppleTalk is set to **Active**. A list of all networked PostScript printers will be displayed within the right column.



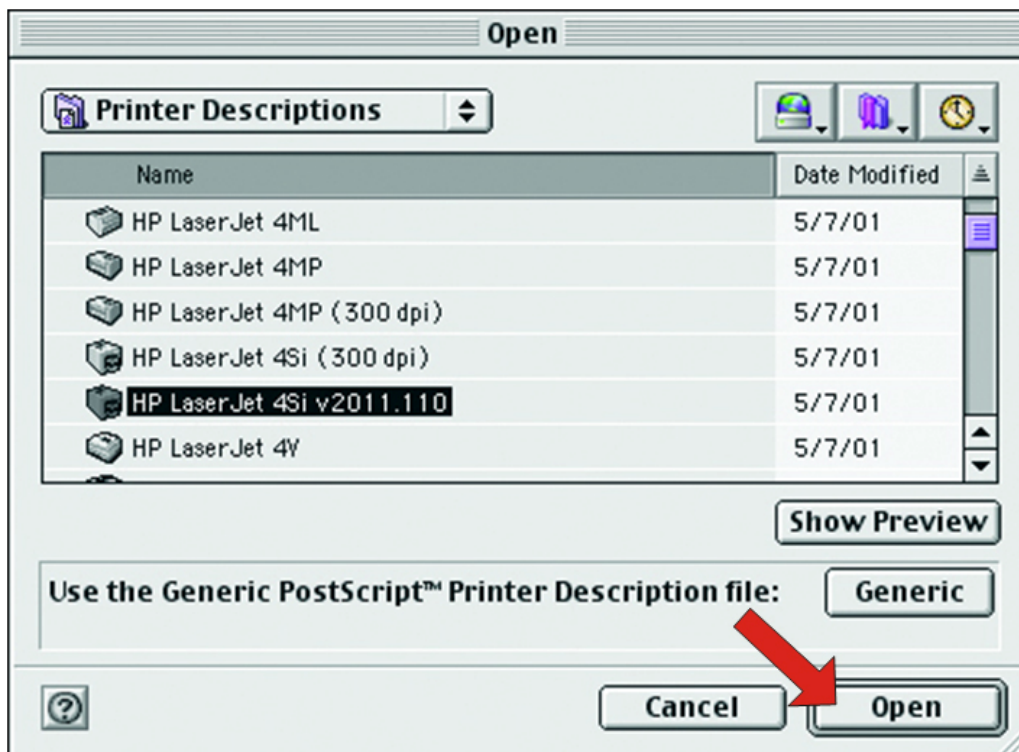
**Step 3** Double-click the name of the **Printer Port** you wish to use.



**Step 4** If you have not previously set this printer as the default printer, your computer will prompt you for a PostScript Printer Description file. Choose **Select PPD**.



**Step 5** Select the appropriate printer description file for your printer. Click **Open**. (If your printer is not listed, click **Generic** to use a generic printer description).



The selected printer will become your computer's default printer. You may need to choose **Page Setup** in any application you have opened.



## 12. Product Specifications

### Printer Connection

**Printer Interface:** One USB port, compliant with USB 2.0 Hi-speed standard.

### Wireless Networking

**Network Standards:** Wireless LAN standard IEEE802.11g.

**Network Data Transfer Rate:** 54Mbps with fallback to 48, 36, 24, 18, 12, 11, 9, 6, 5.5, 2, and 1Mbps.

**Network Mode:** Support both Infrastructure and Ad-hoc mode.

Wired Networking

**Network Interface:** One 10/100 Fast Ethernet port (RJ-45 connector).

**Network Data Transfer Rate:** 100Mbps.

### Network Protocol Support

**Transport Protocols:** TCP/IP, SMB, NetBEUI, and AppleTalk.

**TCP/IP Protocols Support:** BOOTP, SNMP, Telnet, FTP, LPD, DHCP, and IPP.

### Hardware

**SDRAM:** 8MB.

**Flash ROM:** 2MB.

### Operating System Support

- Windows 95/98/ME, Windows NT, Windows 2000/XP/2003;
- NetWare 5.x (NDPS LPR remote printing);
- HP-UX Unix, Sun O.S, Solaris, SCO Unix, AIX;
- Unixware and Linux;
- Mac OS, AppleTalk.

### Management

**Standard:** SNMP

**MIBs:** MIB-II (RFC 1213).

**Utilities:** PS-Utility, PS Wizard.

### Environmental and Physical

**Power Supply:** 5VDC.

**Operating Temperature:** 0°C to 50°C.

**Storage Temperature:** -25°C to 55°C.

**Humidity:** 5% to 95%, non-condensing at 30°C.

### EMI Compliance

FCC Class B, CE Class B, VCCI Class B

## 13. Appendix

### ***Technical Support***

E-mail: [support@airlink101.com](mailto:support@airlink101.com)

Toll Free: 1-888-746-3238

Web site: [www.airlink101.com](http://www.airlink101.com)

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